

**SHIP PRODUCTION COMMITTEE  
FACILITIES AND ENVIRONMENTAL EFFECTS  
SURFACE PREPARATION AND COATINGS  
DESIGN/PRODUCTION INTEGRATION  
HUMAN RESOURCE INNOVATION  
MARINE INDUSTRY STANDARDS  
WELDING  
INDUSTRIAL ENGINEERING  
EDUCATION AND TRAINING**

November 1995  
NSRP 0460

# **THE NATIONAL SHIPBUILDING RESEARCH PROGRAM**

## **Fourth National Workshop on Human Resource Innovation in Shipbuilding and Ship Repair**

**U.S. DEPARTMENT OF THE NAVY  
CARDEROCK DIVISION,  
NAVAL SURFACE WARFARE CENTER**

in cooperation with  
**National Steel and Shipbuilding Company  
San Diego, California**

# Report Documentation Page

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November 1995  
NSRP 0460

**ANALYSIS COMMITTEE  
RECOMMENDATIONS  
PRODUCTION AIDS  
GUIDING FOR SHIPBUILDERS  
STANDARDS THE NATIONAL  
INTEGRATION SHIPBUILDING  
FOR SHIPBUILDING RESEARCH  
ON AND COASTAL PROGRAM  
SOCIAL EFFECTS  
TRANSFER  
PROGRAM**

§ **Fourth National Workshop on  
Human Resource Innovation  
in Shipbuilding and Ship Repair**

**U.S. DEPARTMENT OF THE NAVY  
CARDEROCK DIVISION,  
NAVAL SURFACE WARFARE CENTER**

in cooperation with  
**National Steel and Shipbuilding Company  
San Diego, California**

# **Fourth National Workshop**

ON

**HUMAN RESOURCE INNOVATION IN SHIPBUILDING AND SHIP REPAIR**

## **PROCEEDINGS**

Sponsored by

### **Panel SP-5 – Human Resource Innovation**

of the

Ship Production Committee

of the

Society of Naval Architects and Marine Engineers

**NOVEMBER 1995**

### **NATIONAL SHIPBUILDING RESEARCH PROGRAM TASK N5-93-I**

Covered by Subcontract No. MU256604

between

National Steel and Shipbuilding Company  
San Diego, California

and

Win/win Strategies  
Bethlehem, PA

## FOREWORD

This publication Proceedings of The Fourth National Workshop on Human Resource Innovation in Shipbuilding and Ship Repair, is the deliverable of a project managed by Win/Win Strategies of Bethlehem Pennsylvania, for the National Shipbuilding Research Program (NSRP) under Subcontract No. MU256604 between National Steel and Shipbuilding Company (NASSCO), San Diego, California and Win/Win Strategies covering NSRP Task N5-93-I.

The project was performed under the auspices of Panel SP-5, Human Resource Innovation of the Ship Production Committee of the Society of Naval Architects and Marine Engineers.

The theme of the Workshop was Human Resource Innovation-The Key to a Competitive, World-Class American Shipbuilding Industry.

The overall objective of the Workshop was to bring the attention of a more diverse audience than is normally reached by Panel SP-5 the activities and importance of the National Shipbuilding Research Program to examine both the content and process of human resource innovation as it is practiced in this country today and to disseminate new managerial practices and organizational concepts developed for implementation within United States shipyards.

It is also intended that the range of topics, the manner of presentation and discussion and the quality of the speakers will heighten interest in human resource innovation in both experienced practitioners and in those who are testing the waters.

The Workshop was held on June 13,14 and 15,1995, at the Maritime Institute of Technology in Linthicum Heights, Maryland. Participants included representatives of private and public shipbuilding and repair organizations, organizations in related industries, labor unions, universities, the U.S. Navy, DOT-MarAd and DOL-OSHA.

Frank Long, Principal Consultant of Win/Win Strategies, was the Workshop Project Manager. He was also responsible for audiotaping the proceedings, transcribing the tapes and editing the transcription to produce these Proceedings.

Chuck Rupy and W. D. "Chico" McGill, Chairman and Vice Chairman, respectively, of Panel SP-5, are due special recognition for the quality time they devoted in assembling the outstanding roster of speakers and in developing and implementing the theme of the Workshop in both its preparation and its presentation. Thanks are also extended to Dan Seidman of MarAd and Lyn Haumschilt, NSRP Program form NASSCO, for their assistance in tape-recding the presentations under the less-than-ideal taping conditions that prevailed throughout the Workshop sessions. My very highest thanks and praise are extended to my secretary, Lynn Deppe, who worked some kind of magic to decipher and transcribe the chaos of garble contained to a greater or lesser extent in all of the tapes and for her overall dedication to the thorough and accurate completion of these Proceedings.

Editor's Note: Because of the inferior quality of the tape recordings it was not always possible to capture, in transcription the spoken material as originally presented. Nevertheless, every effort was made to preserve the gist and intent of each presenter's message. The presenters' indulgence is requested in those instances where we failed. Beyond that fortunately, the welcoming remarks of Mr. McGill were simply unsalvageable. He has our apologies for failure to include his remarks in these Proceedings on that account.

Additionally, **no** attempt was made to capture the questions and answers which came up during the sessions because the tape recorder could not pick up the questions from the audience, the questioners did not identify themselves and the presenters did not repeat the questions before responding.

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# AGENDA

## XZTuesday, June 13

### A.M.

8:30-8:45

Chuck Rupy, Chairamn, Panel SP-5 and  
W.D.'Chico" McGill, vice Chairman, Panel  
SP-5

**Welcome, Introductions, Agenda Review  
and Housekeeping**

**8:45-9:15**

RADM John S. Claman, USN, (Ret),  
formerly Deputy Commander, NAVSEA for  
Industrial and Facility Management

**Change Management**

**9:15-9:45**

Taylor Jones, Direetor, Office of Maritime  
Labor, Training and Safety, DOT MarAd

**MarAd's Role in the Revitalization of  
the American Shipbuilding Industry**

**9:45-10:00**

Break

10:00-10:30

Jack Barry, President IBEW and Johu  
Meese, President Metal Trades Dept. AFL-  
CIO

**The Key to the Competitive, Work/-  
Class American Shipbuilding Industry**

10:30-11:00

Bob Schaffran Maritech Program Manager,  
ARPA MaritimeSystems Technology Office  
**Maritech's Role in the Revitalization of  
the American Shipbuilding Industry**

## Tuesday. June 13

### A.M. (continued)

11:00-12:00

Jay Bailey, Vice President Manufacturing,  
Bath Iron Works and Brian Canwell,  
Treasurer, IUMSWA/IAMAW, L.L. S-6  
District 4

**The New Labor Agreement at BIW**

12:00-1:30

Lunch

1:30-2:15

Lawrence Liberator, Direetor, Maritime  
Standards, Department of Labor, OSHA  
**OSHA Update and the New Maritime  
Advisory Committee**

**2:15-3:00**

David Amos, Manager, Labor Division  
National Safety Council

**Joint Safety and Health Committees**

3:00-3:15

Break

3:15-4:30

Lawrence Postol, Partner, Seyfarth Shaw  
and James Ellenberger, Ass't. Director,  
AFL-CIO, DOSH and Paul Hearne,  
President The Dole Foundation

**The Interactions of the ADA, Workers'  
Comp and the FMLA**

**Wednesday, June 14**

**A.M.**

**8:40-8:45**

Chuck Rupy and “Chico” McGill  
**Agenda Review and Housekeeping**

8:45-9:15

Robert F. O’Neill, Vice President, American  
Waterways Shipyard Conference  
**The Role of the A WO in the  
Revitalization of the American  
Shipbuilding Industry**

9:15-10:30

Dr. Michael Gaffhey, Director, PEWS,  
NYSSILR, Cornell University  
**Mutual Interest Bargaining**

10:30-10:45

Break

10:45-12:15

**Mutual Interest Bargaining (continued)**

**P.M.**

**12:15-1:30**

Lunch

**1:45-2:30**

H.N. (Rug) Altmansberger, Director, Goal  
sharing, coming, Inc.

**Goal Sharing at Coming Glas**

**2:30-4:30**

Breakout Session

**Gain Sharing or Profit Sharing? Where  
Does This Concept Fit in The Making of  
a Competitive, World-Class American  
Shipbuilding Industry?**

**Thursday, June 15**

**A.M.**

**8:40-8:45**

Chuck Rupy and “Chico” McGill  
**Agenda Review and Housekeeping**

**8:45-10:30**

Henry Shomber, Chief Engineer,  
Design/Build,Product and Process  
Integration The Boeing Company  
**Human Resource Innovation and  
Productivity at Boeing**

10:30-11:15

Chuck Rupy and “Chico” McGill  
**General Review and Wrap-up**

11:15

Adjourn

## Presenters

(Listed in Order of Appearance)

Charles F. (Chuck) Rupy, Chairman Panel SP-5, and Strategic Weapon System Program Manager, General Dynamics Corp., Electric Boat Division Groton, CT

William D. (“Chico”) McGill, Vice Chairman Panel SP-5 and Assistant Business Manager, Local 733, I.B.E.W., Pascagoula MS

RADM John S. Claman USN (Ret.), formerly Deputy Commander, NAVSEA, for Industrial and Facility Management and currently Principal AMS, Fairfax VA

Taylor Jones, Director, Office of Maritime Labor, Training and Safety, Department of Transportation - MarAd, Washington DC

Jack Barry, International President International Brotherhood of Electrical Workers, Washington DC 20005

John Meese, President, Metal Trades Department AFL-CIO, Washington DC

Jay Bailey, Vice President Manufacturing, Bath Iron Works, Bath, ME

Brian L. Canwell, Treasurer, Industrial Union of Marine Shipyard Workers of America/IAMAW Local Lodge S-6, District Lodge 4, Bath ME

Robert SC- Maritech Program Manager, ARPA Maritime Systems Technology Office, Fairfax, VA

Lawrence L. Liberatore, Director of Maritime Standards, Department of Labor-OSHA Department of Maritime Standards/Program Washington DC

David Amos, Manager, Labor Division National Safety Council, Itasca, IL

Lawrence P. Postol, Esq., S- Shaw, Fairweather and Geraldson Washington DC

James N. Ellenberger, Assistant Director, Occupational Saf&y and Health AFL-CIO, DOSH Washington DC

Paul Hearne, President The Dole Foundation, Washington DC

Robert F. O’Neill, Vice President American Waterways Shipyard Conference, American Waterways Operators, Arlington VA

Dr. Michael Gaffney, Director, PEWS, NYSSILR Cornell University, Ithaca NY

H. N. (Rug) Altmansberger, Director, Goal Sharing, Corning Inc., Corning, NY

Henry Shomber, Chief Engineer, Design/Build and Digital Pre-Assembly, 777 Division The Boeing Company, Seattle, WA

## Participants

Gordon Baxter	General Representative	Metal Trades Dept. AFL-CIO	Seattle, WA
James Blenkhorn	Principal	American Management Systems	Norfolk VA
Patricia Bradshaw	Director, HRC	Naval Sea Systems command	Arlington VA
Carl Chapman	Naval Architect		Ocean City, NJ
Pamela Cohen	Research Associate	University of Michigan(TRI)	Ann Arbor. MI
Clint Collamore	Outside Machinist	Bath Iron Works	Bath Maine
Earnie Curtis	Field Director	United Brotherhood of Carpenters	Washington DC
Joe Daddura <sup>2</sup>	OSH Specialist	OSHA Maritime Standards	Washington DC
Jack Garvey	Marine Consultant		College Park,MD
John Harbison	Chief Shop Steward	IBEW Local 733	Pascagoula, MS
Lyn Haumschilt	NSRP Program Manager	NASSCO	San Diego, CA
Carl Hinrichson	Manager of Ind. Relations	NASSCO	San Diego, CA
Joanna Jones	Dir., Employee Development	Bath Iron Works	Bath ME
Jim Kelly	Chief Health and Safety	GD - Electric Boat	Groto, CT
Bob Kesinger	Business Rep. - Painters	District Council 5	Seattle, WA
Alex Lansburg	Program Manager	Maritime Administration	Washington DC
Dorothy Myles	Mgr., Labor & Emp. Rel.	Ingalls Shilbuilding	Pascagoula, Ms
Al Rainsberger	Director of Safety and Health	Todd Pacific Shipyards	Seattle, WA
Dale Rome	Dir., Shipbuilding Tech. off.	Carderock Div. NSWC	Bethesda, MD
Dan Seidrnan <sup>2</sup>	Mgr., Shipbuilding Info. Grp.	Maritime Administration	Washington DC
Odey Shaw	OSH Specialist	OSHA Maritime Standards	Washington DC
Jack Shea	Chief, Workers' Comp.	GD - Electric Boat	Groton, CT
Oren Stephans <sup>2</sup>	Naval Architect	Carderock Div. NSWC	Bethesda MD
Steve Sullivan <sup>2</sup>	Human Resource Manager	Bethship - sparrows Point	sparrows Point,MD
Gayle Stodder	Labor Relations Admin.	Bath Iron Works	Bath, ME
William SWahl	Managing Associate	Coopers & Lybrand	Swedesboro, NJ
Frank Terranova <sup>2</sup>	International Representative	U.A. Pipefitters & Plumbers	Westerly, RI
Sally Textor	Boilermaker	GD - Electric Boat	Westerly, RI
Rick Tim	Business Manager	IBEW Local 733	Pascagoula, MS
Timothy Welsh	Human Resource Manager	Atlantic Marine	Jacksonville, FL
Charles Witt	Electrician	GD - Electric Boat	Norwich CT .
Grant Zadow	Business Representative	IBEW Local 48	Portland, OR

1- Chair, Panel SP-9, Education and Training

2- Member, Panel SP-5, Human Resource Innovation

## WORKSHOP ON HUMAN RESOURCE INNOVATION

Delivered by Charles F. Rupy, Strategic Weapons Systems Program Manager, General Dynamics Corporation- Electric Boat Division and Chairman, NSRP Panel SP-5

For those of you who are not familiar with it, the National Shipbuilding Research Program, also more often referred to by its initials, the NSRP, was established in 1970 for the purpose of trying to lend some help to the ship repair and shipbuilding industry so as to make us more globally competitive. One thing the organizers of the Program did was to establish research panels (see Exhibit I) which are structured to address various disciplines in the shipbuilding and ship repair industries. You have, for example, a Welding Panel, a Human Resource Innovation Panel, a Surface Preparations and Coatings Panel, an Education and Training Panel and so on. The activities of the NSRP are funded by the U.S. Navy. And the way this all works is that the NSRP receives about \$6 million a year which is distributed among these Panels through three program management organizations, each of which is a prominent U.S. shipbuilding company. Program management for Panels 1, 5 and 9, for example, is provided by National Steel and Shipbuilding Company of San Diego. Your fellow participant Lyn Haumschilt, is the Program Manager for those panels.

The Charter of the Panels is to propose and conduct research projects that will advance the state of the art for whatever their discipline is, welding or education and training or whatever. As the projects get accomplished they are reported on in the form of deliverables which are published

As SWS Program Manager for the TRIDENT Submarine Program at General Dynamics, Mr. Rupy manages the installation and test program for Strategic weapon system.

His responsibilities also include On-Site technical support for the United Kingdom's TRIDENT Program at Vickers Shipbuilding Ltd, in England and the TRIDENT Engineered Overhaul Program in Puget Sound.

Starting with General Dynamics with a degree in Electrical Engineering from Monmouth College, in West Long Branch, New Jersey in 1965, Mr. Rupy has made major contributions ranging from significant design changes to innovative contract processes to reduce design and construction costs while improving quality. Mr. Rupy joined Panel SP-5 in 1989 and was elected its Chairman in 1992. During his Chairmanship Panel SP-5 has become a major force in bringing labor, management and government organizations to work together improve the Competitiveness of U.S. shipbuilding and ship repair.

and disseminated throughout the industry. Individual shipyards are then free to use them as they see fit in their particular line of business. (A list of projects completed by Panel SP-5 is contained in Exhibit 2.)

SP-5 Panel is somewhat unique in that we're the only Panel that has representatives of labor unions as members. In fact, you'll hear next from the Vice Chairman of our Panel, Mr. "Chico" McGill, Assistant Business Manager of Local 733 of the International Brotherhood of Electrical Workers.

Although the funded projects are our life's blood, we consider that our major contributions to the industry may be in some non-funded efforts. What we've been trying to do is work within a network of many organizations, like Shipbuilders Council of America various government organizations like MarAd, unions, management and so on, to become a fusing element in the human resource arena. That is, rather than having each individual organization doing its own thing in this field we've been trying to get all of them to speak with one voice as best we can.

An example of a recent success in this effort was in the safety and health area. Labor and management members of panel Sp-5, with the endorsement of Shipbuilders Council and the American Waterways Operators, wrote to Secretary of Labor Robert Reich and suggested the establishment of a national maritime safety and health committee. Mr. Reich accepted that recommendation and authorized the establishment of MACOSH the Maritime Advisory Committee on Occupational Safety and Health. OSHA now sponsors some of the SP-5 members to attend meetings of MACOSH. That is **but** one example of what can be accomplished if we speak with just one voice.

Similarly, with this Workshop. While the Workshop itself is important, what is more important is what happens after the Workshop when you go back home and try to implement some of the things you learn here over the next few days. To help move that along we've been authorized to have a post-Workshop follow-up where we will be following up with you folks and some of the other organizations on the agreements and actions that take place here so as to share with the industry some of the "best practices; so to speak, in the human resource arena.

We will be capturing those agreements and actions here over the next few days and we will put a plan together to organize a subsequent workshop That workshop will be dedicated to devising a follow-through implementation plan. Then we will be publishing the results for distribution throughout the industry in our efforts to reduce the cost of doing business.

That's basically what we're all about.

**NATIONAL SHIPBUILDING RESEARCH PROGRAM**  
**RESEARCH PANELS**

SP-1 Facilities and Environmental Effects

SP-3 Surface Preparation and Coating

SP-4 Design/Production Integration

SP-5 Human Resource Innovations

SP-6 Marine Industry Standards

SP-7 Welding

SP-8 Industrial Engineering

SP-9 Education and Training



**NSRP PANEL SP-5 REPORTS**

Report NSRP 0393

Title: Benefit Analysis of SPC Panel SP-5 Projects & evaluation of SPC Panel SP-5  
Management and Administration

Author RPM Inc. (Rodney A Robinson)

Date: September 1993

Report NSRP 0380

Title: Design and Implementation of Self-Directed Work Teams in a Pre-Erection  
Outfitting Department

Author: National Steel and Shipbuilding Company

Date: December 1992

Report NSRP 0370

Title: Employee Involvement - White-Collar Work Force

Author: RPM Inc. (Rodney A Robinson)

Date: January 1993

Report NSRP 0351

Title: Survey of Programs Designed To Improve Employee Morale In Seven Major  
American Shipyards

Author: WIN/WIN Strategies (Frank Long)

Date: July 1992

Report NSRP 0337

Title: Employee Involvement - White Collar Work Force

Author: RPM Inc. (Rodney A. Robinson)

Date: August 1991

Report NSRP 0331

Title: National Workshop on Human Resource Innovations in Shipbuilhg/Ship  
Repairs

Author WIN/WIN Strategies (Frank Long)

Date July 1991

Report NSRP 0318

Title: A Survey: The Principal Elements of Safety Programs of Nine Major American  
Shipyards

Author Win/Win Strategies (Frank Long)

Date: January 1991

Report NSRP 0301

Title: Employee Involvement/Safety

Author: Bethlehem Steel Corp.

Date: June 1990

Report NSRP 0296

Title: Product Oriented Workforce

Author GD EB Quonset Point Facility (Tom G. Black)

Date: November 1989

Report NSRP 0283

Title: Problem-Solving Teams in Shipbuilding

Author WIN/WIN Strategies (Frank Long)

Date: May 1988

Report NSRP 0282

Title: Employee Involvement and Work Redesign in U.S. Shipbuilding: Analytical Review

Author: Cornell University (Terry Flynn)

Date: April 1988

Report NSRP 0265

Title Organizational Innovations in Shipyard Safety

Author: Peterson Builders Inc. (E.J. Byrnes)

Date May 1987

Report NSRP 0264

Title: Multi-Skilled Self-Managing Work Teams in a Zone Construction Environment

Author National Steel and Shipbuilding Company

Date: August 1987

Report NSRP 0263

Title: GainSharing - Employee Involvement in a Shipyard/Assembly Yard

Author: Kaiser Steel Corp. (Mike Brundy)

Date: June 1987

Note: To obtain any of these publications, contact the NSRP Documentation Center, Marine Systems Division, University of Michigan Transportation Research Institute, 2901 Baxter Road, Ann Arbor MI 48109-2150; phone (313) 763-2465.

## CHANGE MANAGEMENT

Delivered by RADM John Claman USN (RET), Principal, American Management System, Inc.

**W**hat I would like to talk to you about today comes under the umbrella of techniques of change. What is happening in business today as I see it as a consultant today, working with financial institutions and city and state governments and trying to help them adjust to a changing environment.

I also want to cover what NAVSEA did in a naval shipyard. I think that that is very appropriate - to see what a government institution that took on the task of restructuring did in trying to transform itself in the face of substantial downsizing.

And, finally, I will leave you with a definition of change management, the things you have to worry about. We only have a few minutes so, if you don't listen to anything else I have to say, you should take away with you the fact that things are changing and the trends in business organizations that I'll point out.

These are some of the trends in business organizations that I have come across not only during the time I was in the Navy but especially, in the last 10 months. In referring to the British Institute of Management Survey, which was conducted in the last 6 months, of opinions of organizational experts in Europe as to what would be critical success factors in corporations, the overwhelming percent said that the key critical success factor in business is human resources. Over 90 percent of them also talked about increased utilization of information technology; the need for paying more attention to the environment and social pressures that occur in the workplace and the focus on what is the role of management. But I thought it was very significant that 90 percent had answers dealing with a global marketplace and information technology and even 100 percent

Mr. Claman currently acts in the capacity of senior consultant in the financial, state and local government and federal systems arenas providing change management Consulting services to senior level executives and middle managers. He has extensive experience as a line manager leading industrial, procurement and technical organizations through radical and incremental change. During his career in the Navy he held a variety of positions of increasing responsibility leading up to the position of Deputy Commander, Naval Sea Systems Command in his final Navy tour, prior to joining AMS. In that **capacity he acted as** "CEO" of the Navy's eight division 70,000 person public shipyard cooperation. Mr. Claman has earned a BS. in Marine Engineering from the United States Naval Academy and M.S. and Engineer Degrees in Naval Architecture and Marine Engineering from the Massachusetts Institute of Technology.

cited that human resources as the key to a successful business. And it not surprising then if you see this list of trends in business.

- Process Centered Management
- Multifunctional Teams
- Increased Use of Information Technology
- Flattened Hierarchy
- Coach-Leader Management Climate
- Labor Management Partnerships

The first two, especially, are centered on people in the workplace: organizing and aligning your organization and your people's tasks around the process as opposed to functional organizations. Permitting people, through multifunctional teams, to be challenged and to exercise the best that they can offer, increased use of information technology and then the management piece.

The last three are an attack on mmanagement, if you want to call it that but, really, it's a transformation of management away from the hierarchical vertical structure toward a more horizontal, participative type management structure.

Some of the research in this area shows 70 percent of the pefionnance of people in the workplace is controlled by the management climate and that management climate has to do with structure, process, procedures, incentives, leadership style and management style.

So why all this focus on change and trends in the business climate? It's not rocket science. It's obvious that we're dealing in a more global marketplace, more sources of competition, more sources for products. The customers in our market demand more flexible, responsive products, cheaper products and more and better quality. It's not enough to take six months to design a ship and they come to call on you to find out what you've got or you go to call on them and you have to have a whole series of designs ready to go. You have to be able to show them from an engineering point of view how you can mix and match various modules and designs to meet their requirements. It's not like the old way, the way we used to do business with the Navy, where it took six years to develop, design and build. Another reason a people reason, is that people perform best when they are able to get their ideas on the table and have others agree or disagree with them and they are able to bring their own innovations into the workplace. Teams are one way of doing that-empowerment teams.

What are the implications here? Well, as we go to some of these trends where we're going to less hierarchical type manage structure, for instance, there will be fewer middle managers. As

we go to teams, and you have all heard this, workers will invariably want to management themselves. As we go to teams and to the less hierarchical management structure, we're going to have a participative management climate. Horizontal career progression, as opposed to vertical career progression, for everyone, managers and workers alike, will occur. This means that you'll have fewer steps to the top, vertically, but you'll probably have just as many horizontally, moving from a small team to a large team and bringing with you your competency and your skills into the various and different non-stovepipe organizations, in order to broaden your experience, your worth to yourself and your worth to your company. The number of steps, that is, the number of people versus the number of bosses, will remain the same. There will be one boss, the CEO. You'll have the same percentage as a manager or a worker.

But people haven't figured this all out yet. They haven't figured out how this will all work. We tried this in the Naval shipyards. Some did very well; others didn't do very well at all. There is a danger in some of this, though. That danger is that the middle manager, historically, in a stovepipe functional organization is the glue that has held that organization together. It has operationalized the process. Taking away the middle management without also matching the process of holding the organization together will result in catastrophe.

It is very crucial that if you decide to go to teams, if you decide to go to participative management if YOU decide to Streamline your processes, keep the organizational structure and its importance in mind. There's another danger and it is called, in my words, 'Paradox in the Workplace.'" This is probably the real guts of how we interact as managers and as employees. I have kind of been a microcosm of this myself. Having spent 34 years in the Navy working my way up through the system - I went from a very structured organization-a very structured hierarchical type organization -to a company where I'm working now that is completely team based and entrepreneurial. There are essentially two levels of supervision, a CEO, and a bunch of vice presidents. Then, there's the rest of us. We are all off doing our own thing. We work together as teams, whether it's in Minneapolis, Kansas City, New York or wherever, we get together, we do the job, we disband and we go to another team. It has been a little bit of a culture shock to me. I had to learn how to type. I had to learn how to arrange my own travel. I had to learn to do everything. But it wasn't that hard. I exercised some of my philosophy on change in industry: I forced myself to understand why this was happening, to understand the goal of the organization and my role in it.

But the paradox in the workplace is that people need a couple of things. One of the things they need a structure. They need a comfort zone. They need to know that they're going to be taken care of, that there's career progression in it for them and that they can get the training and the incentives that an organizational structure provides for them. On the other hand, they also need to have a sense of independence, self-worth and a challenge. Now, the bureaucracy or organizational structure provides the former. But if it's a company that is very old and set in their ways and as the curve of age in the company goes up and the curve of profits slides down the other side, that means that they are focused on the internal memo writing stuff and the bureaucracy itself, as opposed to focusing on the results of what the company really was in business for to begin with. A company first starts off as a small company and their focus is on profit or whatever it is they are in business for. Too little of that structure, however, can create chaos. You have to have some amount of structure.

On the other hand a team can provide that sense of self-worth, that sense of accomplishment that sense of challenge. A submarine is a team, an aircraft crew is a team, a group working in a compartment where they know all of what's going to go on in the compartment of that ship, putting it together can be a team - a multifunctional team, at that. People on an automobile assembly line are a team. We're not talking about cross training. What we're talking about is people working together, using their skills to help each other in a coordinated fashion.

But the team can't provide everything. A team's focused on the process of getting the job done. There must be some structure that looks after the development of the employees, making sure that their skills are taken care of and their career progression is developed and supported. So how do we approach this paradox in the workplace-the team on one hand and the structure on the other.

I'll talk about a solution we looked at in the Naval shipyards. As background, I went to a high-powered management seminar last Fall where a Harvard professor described this thing that resembled what we came up with in our shipyard adventure which I'll get to it in a few minutes. In a high performance organization you have a combination of the two things at the bottom. You have a combination of coaches who are helping people in their career aspirations, their employee development, making sure they have the right qualifications and direction. You have leaders who are process leaders looking at the product, looking at the process, looking at the revenue, making sure that the business of the process, the product or whatever the **business is in business to** do, is proceeding properly. That type of an organization however, won't work without people respecting

and trusting each other and knowing what their goals are. There are several team building gurus or experts out there. The first thing one of them starts off with is, 'What's the goal and what's your role, and how do you feel about each other?' This is typical and a lot of people discount it as "touchie-feelie" psychobabble-type stuff. The fact of the matter is, however, it works. If people don't get along with each other, things don't get done.

There's a couple of books out on high performance organizations. One of them which I would recommend was written by a real down-to-earth practitioner by the name of Steve Rainer, called **Recreating The Work Place**. Most of the books in this area stress that the changed atmosphere is not created overnight. It takes a long time to do this because people change slowly. It requires the development of new team systems, new process designs and a new organizational structure. But, if the people don't come along and accept it and use it, you're wasting your time. So you have change management on the one hand and, on the other, you have to bring the people into the fold to get them acquainted with the change, to get them to use it and even to change some of their behavior and attitudes, if that is required of them as it was for me, to move into the new work environment.

I'd like now to move on to some of the things we tried and accomplished in a Naval shipyard atmosphere. Essentially, the Naval shipyards constitute a very large organization with about a four billion dollar annual revenue stream. Typical projects were carriers, submarines, nuclear propulsion type stuff with an occasional destroyer. They were in trouble when I took over back in 1990, big trouble. They'd been in trouble for 20 years. It was not unusual to have five to 20 percent schedule overruns and cost overruns. A lot of it was because of the stovepipe organization with an inflexible management system.

As downsizing of the Navy began even before the end of the Cold War, there was increasing competition in these yards with the private sector. Some of the work they won, some they lost and it wasn't surprising why.

Before I took over, my predecessor had done some strategic planning. When I took over we tried to pull this together. In any organization it's people and technology, technology being information technology and process; people are the culture, the people are the glue that holds the whole organization together. We found that our stovepipe organization was not functioning. Processes, mainly management processes, scheduling, work packaging, developing the specifications, customer relations and such were all stovepipe. There's no one person in a shipyard

other than the boss of the shipyard who had a lot of other things to worry about, like housing or what have you, that really controlled the process stream and the revenue stream.

Technology is, as I said not a thing of the future. It is now. It is here with us today. We were able to take advantage of the collaborative nature that technology brings, where you can have several people or groups of people working on the same problem or the same process. We also wanted to take advantage of the nature of client servers where you would have workstations out at the foreman level so that a foreman would have access to schedules, sick leave, specifications on the job and the like.

As part of our strategic plan we developed a Goal Centered Action Plan with the following elements:

- Direct Labor - Reduce mandays 5%/year (up to 20% below baseline)
- Indirect Labor - Improve direct to indirect ratio 20%
- Schedule – Improve schedule adherence 20% over baseline performance
- Improve - Management and Technical Support-Advanced Industrial Management(AIM)
- Material - Reduce unused material to <5%
- Safety/OSH - Reduce severity, accident and lost worktime rates to preset goals;  
Reduce FECA costs
- Environmental - Reduce hazardous waste production 50% below baseline
- Bottom Line: Save \$1.6B over 4 Years

That plan was intended to satisfy four goals: a customer oriented goal, an organization goal, a financial goal and an internal process goal.

If you look back at successful organizations and businesses you'll find that whether they did it on purpose or they just happened to come into it, many of the goals that they set up for themselves fall into some other forecast medium. The bottom line for this enterprise was to save money, but it took all those other goals on our score card to achieve that bottom line. Now, I'll be up front with you on this. The bottom line was created as a result of defense management reviews during the first years. We would be given a target which we tried to negotiate. Fortunately, we had a strategic plan put together before this target was given to us and were able to develop the program around the target. We came pretty close to meeting it. In the beginning, we started investing in changing the culture of the workforce and the first-line managers. It's an investment in dollars and time. We weren't focused on the status charts and the control charts and those kinds of things as much as we were focused on letting people think for themselves, letting people get together and hash out an issue or a particular process. Things like: finding out how to shorten the process of addressing and correcting customer complaints; finding out ways of reducing the time



and cost of applying hull coatings on submarines in drydock and finding ways to install cooling pumps quicker. The results of our efforts were startling. Quite frankly, it gave me, as the leader of this organization, all kinds of information and examples of quick hits and early successes that I could push up the ladder to the Assistant Secretaries of the Navy or the Undersecretary of the Navy, who were constantly hammering on us to do a better job. As a result I would be in a position to say, "Look, hold it, we're on the right track. We have these kinds of things coming down."

Strategic planning, as I said went on before I got there and continued on. We did re-engineering before we knew what re-engineering was. We did know that it had to do with process, but we didn't know that it had to do with organizations and we didn't know that it had to do with information technology. If you want to restructure your process, information technology will help. Another crucial point occurred in February 1992, when we set up the Project Management College. It's essentially a culture change for management. This was where the managers found out there would be fewer middle managers and those managers who were very comfortable as the top dog in the stovepipe organization found out that there would be freer stovepipes.

The bottom line was that these shipyards ended up with a project oriented management system. They ended up, in some cases, with high performance organizations especially those that embraced the project management concept.

The four critical success factors in this enterprise boiled down to leadership, involving people, empowerment and early successes. If you look at these there are all kinds of things that are important, but the most important, at the start, is executive commitment. As you get into the project, if you must involve people so that they can become part owners and have a say in what the new design is going to be, your chances for success are markedly improved. If you empower people so that when they are involved you can get true knowledge of what is really going on in the process, when you do roll it out it will be for the good. And if you don't have successes along the way to keep the momentum going, the momentum to keep people interested as well as keeping your bosses off your backs, you may or may not make it to the end.

OK just to wrap up quickly, a definition of change management is

Integrating process, organization and technological change while building acceptance and modifying culture through communication and knowledge transfer in harmony to successfully achieve new business goals and values.

It's a lot of words but there are three things in there the integration process, organization and technological change. One might say, 'Well, that's what a project manager does.' bYes, he does. A project manager is thinking about the whole thing, he's not focused on the organizational impacts. So that piece of change management, worrying about the design is really worrying about focusing the project on the organizational impacts. That is, what are the things that we have to do in the way of task design, in the way of skill development, in the way of cultural change? What has to happen in order to support this effort? Are we going too far? Are we expecting people to do more than they can possibly do? Is the design viable?

Building acceptance is the second setting. Getting people to be aware, to understand, to accept communications, training and the like. Modifying culture is such that, if they do not want computers, if you roll all the computers into the room you want and nobody will use them, you need to start understanding what it is that's giving people problems with computers and start doing things to help them so that they can come around to them. If the culture is, we don't trust each other and never will, then you're not going to have a very good team-based working environment. You need to start doing things that get people to understand that the other guys are not so bad after all and you can work together. These are all touchie-feelie words, but quite frankly, if you want to be competitive, this is the direction you have to go.

Change starts with a strategic vision a plan. Within that change there are things like, OK we're gonna bottom line here, we're gonna save money. Then you design something to meet that goal. The other consideration addresses values, trust and employee development. A lot of companies say, "Employees are our most valued asset." Go prove it! The values are empowerment and participative leadership. Match the values to the goals. And if you don't don't start.

# MARAD'S ROLE IN THE REVITALIZATION OF THE AMERICAN SHIPBUILDING INDUSTRY

Delivered by Taylor E. Jones, II, Director, Office of Maritime Labor, Training, and Safety, Department of Transportation, Maritime Administration

**M**ARAD's role in the revitalization of the American Shipbuilding Industry is that of a facilitator, providing a window of incentives, assistance with self-help opportunities, and improvements in the financial and marketing infrastructure. The bottom line, however, is that the industry must help itself

While not trying to echo the title of this conference, human resource innovation may very well be the critical key to forging a competitive, world-class American shipbuilding industry! Low cost, high productivity, State-of-the-art designs, and quality construction - all achievable through innovation and teamwork - are necessary to compete on the world market.

Before addressing specific human resource innovation issues, I will describe some of our recent efforts which I would characterize as offering windows of opportunity in which to reinvent the process and become world competitive.

On October 1, 1993, President Clinton submitted to Congress a report entitled "Strengthening America's Shipyards: A Plan for Competing in the International Market." This report is the basis for the Administration's efforts to assist the U.S. shipbuilding industry in transitioning its skills from the military's requirements to help it effectively compete in the international commercial shipbuilding market.

On November 30, 1993, President Clinton signed into law the National Shipbuilding and Shipyard Conversion Act. This launched the five-part initiative which is the most comprehensive program in support of U.S. shipbuilding in over 25 years. The five parts of the program include OECD Negotiations to level the competitive playing field Title XI expansion marketing efforts, ARPA/MAMTECH-industry efforts, and deregulation and use of international standards.

Prior to his elevation to his present position, Mr. Jones served as Director, Office of Budget. He has been with the Maritime Administration since 1990. Prior to joining the Maritime Administration Mr. Jones worked for the Marine Corps Combat Development Command the Bureau of Public Debt, the Department of Agriculture and the Department of the Army in the area of budget and financial management.

Mr. Jones holds a B.S. Degree from the George Mason University.

The first element of the 5 part program was to pressure foreign countries to stop subsidizing their shipbuilding industries and building barriers to closing the price gap with U.S. yards. The Organization for Economic Cooperation and Development (OECD) negotiations were successful and an agreement to eliminate subsidies concluded last December. While phase-in transitions are under debate, implementing legislation is expected this year to allow the agreement to enter into force in January.

The National Shipbuilding and Shipyard Conversion Act of 1993 also contains funds for industry-initiated research and development projects under the Maritime Technology, or MARITECH program of the Advanced Research Projects Agency (ARPA), in collaboration with MARAD. These are cooperative research and development agreements, intended to strengthen the Nation's shipbuilding technology capability in order to both compete in the international marketplace and to better maintain defense readiness. Twenty MARITECH projects were awarded in the first phase of the funding and involved 147 participants located in 22 states and nine foreign countries. Eleven of these projects are being administered by MARAD. As you are probably aware, MARITECH is a cost-shared, industry-led, and industry-driven activity with 50 percent or more of the funding coming from industry.

Now, in the second year of the five-year program 24 projects were just recently selected by DOT and DOD for award. Thirteen of these projects will be administered by MARAD. Copies of the May 4th news release announcing the fiscal 1995 round of approved projects are provided as a handout. There are two types of efforts, those directed to improving shipyard process product technology development and those addressing near-term ship design and construction technology applications.

Much activity is happening in the regulatory arena. The U.S. Coast Guard is reviewing all aspects of their operation and focusing on how they can better assure safety and environmentally safe ship operations while not having burdensome regulations that contribute to making our ships and shipyards uncompetitive in the world marketplace. Many initiatives are under way. MARAD is working with U.S. Coast Guard and industry to assist with these efforts, which do require considerable reinvention of processes and discussions by all involved parties to effect change. -

The most important element of the plan was the extension of government guarantees to the financing of vessels purchased in U.S. shipyards by foreign owners through the existing Title XI domestic loan guarantee program. As I believe all of you are aware, this has created a great interest internationally in building in U.S. yards. This interest has blossomed into a number of firm

orders that provide an opportunity to enter the international market and show the world U.S. craftsmanship, timeliness, and quality.

There were a total of 7 applications approved in FY 1994 for a loan amount of \$286 million. In fiscal year 1995 so far, 9 applications have been approved totaling \$338 million. There are another 27 applications in various stages of review. Additional applications should continue to be filed.

The 16 applications approved so far in fiscal years 1994 and 1995 total \$624 million in financing. These projects include MARAD's approval of the application by Fleves Shipping Corporation an affiliate of Eletson Holdings, Inc., of Piraeus, Greece. This represents the first Title XI financing of large ocean-going vessels for export. The Eletsen order at Newport News also represents the first large U.S.-built commercial ship order for a foreign buyer in over 35 years. The order is expected to generate 500 shipyard jobs.

MARAD also approved and issued Title XI guarantees for the construction of four tankers for American Heavy Lift Shipping. These will be the first U.S. flag tankers to be built to the standards set by the Oil Pollution Act of 1990.

Not all of the Title XI applications are for ship construction, however. The Title XI program was also expanded to allow MARAD to issue loan guarantees for shipyard modernization and improvement projects. As with the vessel financing portion of the program the Title XI guarantees provide the shipyard an alternative means to finance its ship modernization projects.

Guarantees have been approved for modernization projects at NASSCO (\$22.7 million) and Avondale (\$17.8 million), with other projects undercurrent review.

The positive results and growing interest in the Title XI program have been achieved through a true partnership between industry and government. As a result of outreach sessions to address improvements to the administration of the Title XI program and to become more familiar with the procedures and techniques that private sector financial institutions utilize in international shipping transactions work, the timeliness of processing of loans has improved significantly.

Efforts are also taking place through the Departments of Commerce and State to raise recognition internationally of the improved capability and competitiveness of U.S. shipyards under a changed environment. The potential market for ship construction is great. MARAD estimates that from 7,300 to 9,900 large, oceangoing ships will be built for the international commercial market between 1992 and 2001- with the vast majority to be built after 1996.

There are many other efforts underway at MAMD. As part of reinventing government, MARAD has reorganized itself to improve our performance. One very germane example of that reorganization is the creation of an Office for Shipyard Revitalization headed by Mr. Joseph Byrne. The function of this new office is to act as a catalyst for promoting the construction of ships in U.S. shipyards for both foreign and domestic trades and improving the international competitiveness of U.S. yards. This office coordinates and focuses MAMD efforts agency-wide toward shipyard revitalization. To give you a better feeling of our commitment and coordination efforts, a task force composed of top level representatives from all relevant components of MARAD meets each week to exchange information on progress and refocus effort toward really making a difference.

My own office, Maritime Labor, Training, and Safety, prior to the MARAD reorganization addressed only labor and training, with most effort focused on the ship operations side. We have traditionally looked after the federal and six state maritime academies. Expansion of the Office's role to address safety is highly appropriate since human factors have been shown to be the root or contributory cause in roughly 80 percent of all accidents (and that percentage appears to apply to all industries!).

Our new focus also includes shipyard human resource activities. Not coincidentally, improvements in safety concurrently contribute significantly to increasing productivity and competitiveness. Our new office thus retains its interests in labor and training but adds a systems and human factors perspective on safety and encompasses the combined effects of personnel, training management organization, operating procedures, ship and shore operational relationships, and ship design and construction. I am here to offer our assistance to help contribute toward achieving shipyard revitalization and world-class competitiveness through human resource innovation.

I would like to focus on some areas where we can possibly work together and suggest topics for discussion in the break-out sessions. The first is about safety. While needing immediate relief from regulatory burdens on one side to be able to compete internationally, on a safety and health basis there is almost the opposite requirement. Here, implementation of uniform standards for the shipbuilding industry is important to productivity, reducing lost time, and lowering costs. As many of you are probably aware, the Occupational Safety and Health Administration (OSHA) recognized the uniqueness of the shipbuilding industry and made provisions for a special set of standards. An OSHA public advisory committee (called SEASAC), composed of labor and

management representatives, was formed and spent five years developing the standards. Most of the standards, however, remain unimplemented to date.

This March OSHA created the Maritime Advisory Committee on Occupational Safety and Health (MACOSH). MACOSH is broadly chartered to advise OSHA on all aspects of the maritime industry, not just develop standards for shipbuilding. This committee promises to be of great service to the industry. While created as a temporary committee, however, it is hoped that it can be extended to enable it to work with OSHA on a longer term and assist with the quick implementation of standards and accomplish other needs for the shipbuilding industry.

The MACOSH efforts and the urgency of achieving an early set of standards are issues that could be addressed at this conference. I am happy to see Larry Liberator, Director, Maritime Standards for OSM on the program. Having a clear set of standards that protect our workers by reducing injury is very important. Savings in lost work hours and in administrative and legal costs also are present. Achieving standards early is thus a high priority for shipyard revitalization and achieving world-class competitiveness.

One near-term opportunity that surfaced in the June meeting of the MACOSH committee seems worth mentioning at this time as a subject for discussion. That is the possibility of industry and labor jointly developing standard guidelines for “model” safety and health programs in small, medium, and large shipyards. Defining such programs could be the genesis for creating industry-government partnerships for better accomplishing safety goals and achieving them with less paperwork and greater effectiveness.

Another area for discussion, and where MARAD could possibly help as a facilitator, is in the training and of workers. Moving from design and production requirements of military ships to those for commercial ones or to different type of commercial ships in the world market is not insignificant. The competition is also finely tuned to international design and construction requirements. Expert knowledge is thus needed to move to internationally attractive products and to become aware of and learn to apply new techniques and approaches for producing world-class, high quality ships. Partnerships for facilitation of training about applicable regulations and standards and on the new methodologies and partnership for achieving world-class marketable products is worthy of discussion.

I might mention that MARAD and industry held a number of roundtable discussions to address timely topics of critical need. Additional roundtable type discussions to bring top management together and address labor and environmental issues are currently under consideration

for late summer or early fall. A topic for today's human resource innovation workshop could be the development of important issues that may need such top level discussion and attention.

One final activity at MARAT) that I would like to mention is the National Maritime Resource and Education Center, or NMREC. This center is a number of things and is intended to be a central information resource and facilitator within the Government for the shipbuilding industry. NMREC has acquired extensive information for this purpose, including copies of regulations and construction standards from various sources worldwide. NMREC materials are available and easy to obtain.

As a last note on NMREC, I would add that the Center has recently developed a branch to the NLARAD MARlinespike electronic bulletin board specifically for "Shipbuilding & Repair. This board provides a means of quick communication. A lot of information is on the board and people at MARAD to talk with are noted There is, for instance, a section on OSHA in which the latest activities of the MACOSH group mentioned earlier can be found. In addition to being able to review information on the board, many menus on the board contain an option for suggestions and questions, providing for a two-way communication. NMREC'S value depends upon your interest, use, and feedback. Brochures are provided to introduce you to this resource.

In conclusion it is clear that in today's world management must work hand in hand with labor to form new partnerships and diligently search out methods to achieve success in world competition. This workshop provides an opportunity to discuss this process and move forward.

I look forward particularly to hearing of lessons learned from speakers on the program coming from other industries. Shipbuilding is certainly not unique in having difficulty in gaining inroads to the international market.

What do we need to be a success in the world class competition? I think that labor, management and government must work closely together on many levels, and human resource innovation and new partnerships are critical keys.

I hope that we can join together and substantively address some of the innovations that are critical in America's quest for international competitiveness in the shipbuilding market.



## THE KEY TO A COMPETITIVE WORLD-CLASS AMERICAN SHIPBUILDING INDUSTRY

Delivered by Jack Barry, International President,  
International Brotherhood of Electrical Workers, and  
John Meese, President, Metal Trades Department, AFL-CIO

*Mr. Barry* **A**II of you are familiar with fact the that the IBEW has a strong presence and is well represented by Local 261, and it's a pleasure to be a part of this panel. It is also an honor to share the podium with John Meese, President of the Metal Trades Department. I'm proud to say that the IBEW is affiliated with every shipyard council in the United States. In John our locals have a tireless advocate on behalf of issues affecting this Very vital industry. And also I want to acknowledge my friend Chico McGill, who was instrumental in allowing me the Opportunity to address this disingukhed group. Chico is Assistant Business Manager in our Local 733 in Pascagoula, Mississippi. He is fighting hard to continue fderal funding of the Naval operations in the port. He has also been a strong voice for shipyard safety.

As a veteran of the Navy, I know firsthand the importance of keeping the United States a strong maritime power, both in the military and commercial sense of the word. You men and women in this room have been in the forefront of that effort and I salute you for that. The question is, 'Where do we go from here?'

Mr, Barry's career in the electrical construction industry began as an apprentice and progressed through Journeyman, Fcrenan and General Foreman. His career as a union representative includes tours of duty as Business Manager of a Local, Intemational Representative and International Vice Oresident of the Third District, cmnprising New York,New Jersey, Pennsylvania and Delaware, Mr. Barry's recognition.for outstanding contributions to the.c6immunity include selection as 1994's Man the Year by the Cardinal's Commiteeon the Laity for the Archdiocese of NewYhrkJhe"God%nd Country Award"lhnthe St.. George Association, Chapter #80 in NewYork, and the "Bro&ejho@Sist&ho@ Labor Award?. from theNational Conference of christians and Jews. He also holsa many labor and public positions which include VP and Executive Council Member of the AFL-CIO, VP and Executive Concil Member of the Building and Construction Trades Department, the Industrial Union Department and the Metal Trades Department, President Clinton has appointed him to serve on the Competitiveness Policy Council and the Presedent's Export Council.

The stated topic of this forum, which links human resource innovation and competitiveness, hits the target dead on. The ability of labor and management to work together is crucial for the future of U.S. shipbuilding. The keyword you've heard this morning is innovation. How we interpret that word and what we do about it will make all the difference. The need for innovation is undeniable. The challenges facing United States shipbuilding are far different from those in the past. Meeting them with the answers of the past would be an injustice to everyone and a mistake to the future of this industry. To revisit those answers, therefore, is like whistling past a graveyard. You might feel more secure in the short run, but it's a ticket to oblivion in the long run.

What kind of change? If managers think that innovation is some kind of code word for destroying the gains that shipyard workers have made in the past in the name of competition, they had better think again. I say without reservation that in terms of quality, productivity and skills, U.S. shipyard workers are the most competitive in the world. That if this were a perfect world, we would not be going up against heavily subsidized foreign competition. The fact is, however, we do not live in a perfect world. We have to deal with life as it is, not as we wish it to be. We need to work together to balance the uneven playing field and we need to do it very soon. And that's the one on which we compete on a regular basis. Until that day comes, we need to sharpen our competitive edge by working smarter and more effectively. To make real innovation the first requirement takes a healthy dose of common sense. Everybody in the entire industry, from the CEO to the newest hand in the shipyard, needs to ask him or herself "What are our common goods and what do we do to accomplish them?" This is the most fundamental step.

The IBEW has been one of the foremost unions in organized labor in promoting the use of mutual gains bargaining. It is a central part of our education program. We have worked with Cornell University to implement this part of our program, and I know that Dr. Michael Gaffney of Cornell will be talking to you later in the conference about this concept. Mutual gains bargaining does just what it says. It compels both parties to look at what they can gain by working together instead of what they can lose by fighting. It asks the common sense question that I mentioned Here. Mutual gains bargaining requires a certain degree of trust. It means dropping your guard a bit and trusting that the other guy won't sucker-punch you. In that sense, yes, it is tricky. But when both sides are committed to it, mutual gains bargaining works. The first thing you should know about mutual gains bargaining is that it does not ask either side to be something it isn't. Management has the responsibility to manage, labor has the responsibility to represent the workers,

who have formed the union to provide them with a voice on the job. Within that framework, however, there is plenty of room for innovation.

For those of you who may not know it the IBEW is a very diverse union. In addition to our maritime locals, we have members in construction utilities, manufacturing, telecommunications, broadcasting and recording, and railroads. Every one of these industries has its own unique challenges. All, however, have faced common problems of both job losses, competition and pressure to cut costs. In some cases, these challenges created more friction between the union and management but more often, they have served as a wake-up call to both sides that things must be done differently. Whether the instrument of change is mutual gains bargaining, employee participation programs or simply more open lines of communication, the most successful locals have been those willing to take risks, to innovate. This is true even in industry, where the old ways of doing business have been ingrained for decades.


If you look at IBEW success stories across North America, you will see that the common bond among them has been good faith. When management comes up with a plan or a scheme to cut cuts that was developed by accountants or outside consultants, then the workers are rightfully suspicious. But if the workforce has a say in how change will be implemented then the potential for success increases dramatically. For example, the Minnesota IBEW construction locals are working hand-in-hand with organized contractors to win back a bigger share of the market. In Arizona, IBEW members at a utility are saving jobs and playing a role in redesigning work assignments to job classifications. In Indiana, IBEW members at a refrigerator manufacturing plant have virtually stopped the contracting out of work and brought jobs back in-house because they worked with management to develop faster, more efficient and higher quality methods of doing the work. I could cite more examples but I think the point is clear. If both sides operate in good faith cooperation-operation gets better results than confrontation. I would also add that the wages and benefits, at the examples I just gave, are top notch, which further debunks the myth that high labor costs, alone, hurt a company's competitive advantage. There's no magic bullet for innovation; there's no easy answer. In some of the examples I just mentioned, the two sides went into a room and screamed and cursed at each other before settling on something that works. If the good faith is there, it will work. The smartest managers realize that they do not have all of the answers. They know that the work force represents a very valuable and powerful asset to the company. They seek to utilize the skills and experience that the workers bring to the job. They want to tap into the ideas that only those actually doing the work can have. The best union leaders

are those who come to the realization that protecting every last little work rule that has been developed over the years does his or her membership no good in the long run. Some of our smartest business managers have traded some outdated rules in favor of a more genuine voice for their members in the operations of the company, realizing that this is what gives real power to workers. Only when attitudes such as these work in America's shipyards will true innovation take place. When cooperation and trust exist, other things are possible.

Now more than ever, workers and management in the maritime industry need to speak with one united voice at Congress and the public about the need to maintain a world-class shipbuilding capacity in our country. I have never understood why the United States has chosen to gamble with its national and economic security by following a suicidal policy toward the maritime industry while other nations heavily subsidize their shipbuilding facilities and protect their flag carriers. We are literally throwing away our national advantages. As China becomes a bigger player in this shipbuilding picture, our position will only get worse. We seem so enraptured by the siren call of "free trade" and "free markets" that we fail to see that the rest of the world is having the last laugh at our expense. Yet, if one proposes, as many of us in this room have, that we fight back using tax or trade policies, we are somehow being un-American. There seems to be a basic agreement on the direction we need.

At the meeting the AFL-CIO Maritime Trades Department held several months ago, Senate Majority Whip Trent Lott declared "I want a U.S. flag merchant fleet manned by American crews and U.S. ships built by American labor." The good Senator went on to describe how he doesn't like to see his neighbors in Pascagoula put out of work by unfair foreign competition and foreign flags on a ship in the harbor. If a political figure like Trent Lott, whose conservative credentials are unquestioned, can take such a position then surely there is hope for building a strong bipartisan consensus for change. Such political efforts don't just happen. They come to pass only through determination hard work and smart planning.

If, as we have been saying this morning, human resource innovation is the key to a competitive shipbuilding industry, then I want to see all of the human resources in the maritime industry, management and labor alike, working together in a strong, grassroots political effort to craft a sensible, realistic maritime policy that allows our country to compete in the real world. We need to work together to support the Jones Act, to save the SEAWOLF submarine, to punish unfair foreign competitors and to fight for continued funding for our shipbuilding capability.



On the 50th anniversary of victory in World War II it would be a crime for our nation to forget that lack of preparation cost dearly in that conflict. We have a responsibility to ourselves and the future generations not to squander the shipbuilding capacity that fosters military readiness. A large and complex industry like this cannot be reassembled at a moment's notice. Once it is gone, it will take years to put it back together. Unfortunately, our enemies will not have the courtesy to wait before they test our strength.

Let me close by saying there's nothing inevitable about the decline of the U.S. shipbuilding industry. We have the power to change things if we have the will to do so. I hope that this conference serves as a springboard for a new multi-lateral effort to save this vital industry, to help keep our nation strong, prosperous and free. I leave you with one admonition. The good Lord created us with two ends and a connecting link in between. On one end we sit and the other end we think. Success in life depends on which end we use. Heads we win, tails we lose.

Mr. Meese

When I was just a little fellow my father told me that if two people agree all the time, one of them isn't necessary. After listening to President Barry, I'm not too sure I'm necessary. I'd like to thank the IBEW for the support it's given the department and I'd like to note that sitting in the front here is Gil Bateman, who's been the department's representative on the DOD Wage and Policy Commission and has done an outstanding job.

When I got this letter from Chico McGill asking me to be here, he said he'd like me to talk about the revitalization of the shipbuilding industry. That made me feel very good because, ordinarily, people talk about resuscitation. For all practical purposes, shipbuilding was dying or had almost died in the United States. It is now making what I believe is a significant comeback and I think that we can add a great deal to that if we'd do what we should do, both management and labor and government, to take care of the problems we're facing.

It might be well if we had some concept of how we got to where we are. First of all, you have to understand that from our very first day we were shipbuilders in the United States. We built them of wood and iron and steel to go above the water and below it, from sails to atoms. We did it better than anyone on earth and we still can. Part of the problem was what happened to us after World War II. We frankly didn't have much competition in the world because we had destroyed most of the rest of the world's shipbuilding capacity. The ravages of World War II didn't affect us much. So we could build and not many others could. We had little competition. But rather than reinvest and improve our systems, technology and processes, we took profits.

Eventually, it caught up with us. It caught up with us when those yards that were being rebuilt, to a great extent by us, or at least with our technology, were built better than ours. They

Mr. Meese began his industrial career as an Apprentice Machinist at the U.S. Naval Gun Factory, Washington D.C. and completed his apprenticeship there in 1956. After a brief venture as an independent entrepreneur from 1960 to 1966 he returned to Government service at David Taylor Model Basin, Carderock, Maryland. During his career as a union representative he held the positions of Steward, Chief Steward, Secretary-Treasurer, Vice President, President and full-time Business Representative. He was appointed Special Representative in the Government Employees Department of the International Association of Machinists and Aerospace Workers in May, 1968 and, in May, 1973 he was appointed National Coordinator of the Government Employees Department. He was elected President of the Metal Trades Department, AFL-CIO and took office in January, 1994.

were new, they had better processes, they had better equipment, they had everything that we had and they had it better than we had, except better employees. Their people weren't as well trained or as capable as ours, so we managed to maintain a small edge in that process, but eventually even that dwindled to the point where we were no longer competitive. Our wages at the time were higher, as well as our benefits. We had much better equipment with which to work, much better processes, newer yards and higher concepts. They didn't have the work rules that we had to deal with through our labor contracts so they were literally open to use almost anyone- maximum utilization of employees.

They learned something else from us- how to get subsidies. And when you put all those together, they were getting their subsidies at the same time they were being taken away here. But they learned that from the United States, too. That wasn't something that they sat around and figured out themselves. They just grabbed what they could from us and put it to better use than we did. And we weren't competitive anymore and work started to dwindle. And frankly, as I said, we were in a period where our shipbuilding in the United States seemed to be, if not dead, a dying industry.

Now the industry is starting to make a comeback. A significant comeback. What's causing it? Well, first of all, we're no longer very competitive on wages. We're much lower in wage and benefit packages than most of the countries that we compete with. Great idea. Secondly, some of the shipbuilders have finally made some determinations that maybe we had some good ideas from the very beginning. And they are looking very hard at what we call worker empowerment. (we'll have to talk just a little bit more about that before I leave.) And they are also talking to unions about better utilization of employees. We have even reached the point where foreign shipbuilders are looking at the United States as a place to build to build ships. As a matter of fact, before this year is out, I expect that we will have a foreign shipbuilder in the United States building foreign ships with United States labor and a Metal Trades contract. This is a total switch in the way things work.

But what do we have to do to accomplish this? What does the union have to do? Well, we have to understand that we can't keep doing things the way we were. Frankly, we've got a problem in the United States in dealing with change. It's not always unions that have caused this problem even in the utilization of manpower. Frankly, a lot of our shipbuilders that did a lot of business with the Navy didn't have much incentive to do things faster and better. The longer it took, the more they were paid, the more profit they made. Their profit was based on gross pay so,

"What the hell, why hurry?" We simply cannot have it that way anymore. We just heard that the Navy has gone down from 600 to 300 ships and they've gone from 11 shipyards to a helluva lot less than 5 1/2 shipyards in that time frame, too. That means that the shipyard closures have not been consistent with this need.

We, as unions, are going to have to meet the employers, and, if necessary, force them to change the way they do business. We are going to have to insist that we will no longer have a machinist standing at a pump waiting for a pipefitter to come down from a break in the line so he can take it in for repair. We're not going to be able to waste time and stay competitive. But neither are we going to be able to deal with this problem unless the unions and the employer deal with it. Empowering workers doesn't mean asking each individual worker how he wants to do things, as some of our employers, especially our shipyard employers, seem to think. If you want to know what the workers think, ask the people that represent them. That's us, the unions. We have the answers. As you fly outside of our game, we'll fly outside of yours. Very simple. This is a game that has to be played with both parties satisfied that they have a total involvement in the process and both have something to gain if it works.

From the union's viewpoint what does it need to do? It needs to protect the integrity of the crafts and it still has to use people. How do you do that? Well, probably every one of our crafts has some inherent duty or assignment that no reasonable employer would assign someone else to anyway. In talking about this to one employer, the employer came up very quickly and said 'Well, I understand that, I've never assigned laser alignment to anybody except the people who have been trained to do that. I never would assign the line boring of the bearing mounts for the shafts to anybody except the people that do that all the time, because that's not the type of function you're going to rotate among people.' But there are many things, parts of what we do, that, literally, don't have to be grasped tightly as ours and ours alone. Most of the duties of our jobs, with some training, could be performed by others, so that we never would have people standing around waiting for someone else to show up so they could finish the job. Is this going to reduce the number of employees we need? Absolutely! Absolutely! Accept that as a given. Is it going to do anything else? Yes. Probably it's going to save the jobs of those who are left for a longer period of time. And we have to negotiate this from the union's viewpoint considering not only what we have to do but also what we can't do. You have to understand that we can't keep things the way they are and stay where we are and earn a living.



As soon as we get those concepts clear then we can start to teach the employer how we can help do the job better. Because, frankly, what we have to be considerate of is that we have to create profit. Because that's the only place we have to get wages and benefits. And we can't get a bigger piece of the pie so we have to help make the pie bigger. There is nothing very complicated about the process or the mathematics of this. And the way to do that is to do more with less. Now, in order to do that we have to compensate these people who are going to be asked to learn additional skills. We have to also involve the employees in the decision making on the job and the unions involved in the decision making at higher levels. That means that I expect the company to open the books. I don't intend anymore to sit at the bargaining table with an employer who says, 'We are losing money but I can't show you.' I want to see. I think the people are entitled to know what their efforts have brought about. Where their failures and their successes are. If you want to improve, you have to use your successes in the areas where you haven't had much.

We have a lot of things to do in this. We have to have a better system of communication. Frankly, that hasn't been very good in the past. With many employers, the concept of communications is: they talk, we listen and, afterwards, we ask questions and they selectively answer. That just won't get it done anymore.

We have to do a better job of resolving disputes. We have to look hard at the old systems because they really haven't worked very well. Frankly, if we have a system where union and labor are working together, we don't have much need to have strikes. As a matter of fact, if we're working together there shouldn't even be an occasion for a strike. Now, that doesn't mean we have to agree all the time either. But it does mean that we have to find resolutions to our problems. Dispute resolution in its simplest form only requires two advocates, not adversaries, but advocates, seeking one common response. What do we have to do to fix what is wrong? We're not looking for who is wrong because we can never fix "who's: but we can fix "what's." So we have to have two parties asking, "What is wrong and what do we do to make it better?"

In the past we have used a system that worked very, very well for us, called arbitration. It doesn't work very well anymore. Between the two of us, we've turned our labor relations program over to the lawyers. It's the stupidest thing we've done there in our history. We can't have an arbitration case without a brief. I was probably ten years into this movement and I thought the only briefs that existed were the ones I put on in the morning after I shower. And now you can't have an arbitration case without a brief. And the arbitrators love it because they get paid for reading it and they make damned sure they get paid well for it. We need to ensure that we find the

system that tells arbitration you are either going to run by our rules or you're not going to run at all. We don't need briefs. We need to tell you what we see as being wrong and you tell us what we do to make it right if we can't agree collectively. Nothing more, nothing less. Simple, quick it should be very responsive. If any of us sent a lawyer to an arbitration table or to a negotiation table, we should then resign our position in management or labor and go into the legal profession. Maybe what we ought to do is go to school and become lawyers. And then we would better understand this processes that is killing us.

We need to help the employer. We need to find ways to help the employer do the job better, faster, with less people and more profit. That has to be our goal as well theirs. For that, however, we should get a better distribution of the profits that we create. And we should be the ones that have the final say in that department with of course, the employer's okay. There's nothing very complicated about what we need to do. We can talk for a very long time about the things that are wrong but, frankly, we had better use most of our time in trying to decide what we need to do to make them right.

And let me close by saying this. Whether you're a government agency or whether you're a private shipyard if you employ contractors that are anti-union and resist the law and resist organizing, then I will treat you as anti-union. Thank you very much.

## **MARITECH'S ROLE IN THE REVITALIZATION OF THE AMERICAN SHIPBUILDING INDUSTRY**

Delivered by Robert Schaffran, Maritech Program Manager, ARPA, Maritime Systems  
Technology Office

**T**aylor Jones, in his presentation earlier this morning, covered a lot of the President's five-part initiative for helping the industry. What I want to talk about a little bit is some of the philosophy that we're trying to incorporate into the Maritech piece of it. Four of the five elements of the President's initiative, namely Title XI, leveling the playing field, reducing regulations and marketing assistance, are efforts that are also aimed at trying to resolve problems that are outside the jurisdiction of the shipyard. Part of the problem we've had in this country for a long time is that we've spent a whole lot of our efforts addressing those problems that are not ours. We're always looking to point the finger at somebody else. For example, we always complain that the foreign shipyards have a subsidy, or it's because of the regulations that we can't compete, or it's this or it's that. The Maritech piece of the program is a piece that's trying to help shipyards focus on their internal problems, that is those things that domestic yards have to do internally to become competitive in the international marketplace. We haven't done a whole lot of that for the last 20 years. The piece that we have been doing with the the National Shipbuilding Research Program has been a sort of a strong element. But for the first time, the Maritech Program put some real dollars on the table to work with the shipbuilding industry to help them address their internal problems to become competitive in the international marketplace. And when I talk about real money, this is a *\$220 million, five-year* program. We're spending \$40 million this year, there's \$50 million in the budget for next year, and there'll be \$50 million a year for the two years after, and that's it.

Let's look at what the internal problems are. You've heard it said several times today that, if you want to become competitive in the international marketplace, there are two key elements that you must have. First, you must have products to sell and, second, you have to be able to sell these products competitively at world market prices and make a profit. Two very simple concepts. The Maritech Program is structured to deal with those two concepts-to build products to sell and to develop processes to sell the products competitively.

The design part is easy, but the United States is at a disadvantage because we have not been in the international commercial shipbuilding marketplace for over 30 years. Consequently, one of our big problems is that our competition has thousands of designs that they developed over the last 30 years. They've sold them they've continually improved upon them, they've evolved into some world-class designs which they offer to their customers. We in the United States have zero. The first thing we have to do is develop designs and then develop product lines to sell. The main thrust of the initial phase of the Maritech Program therefore, is to develop a portfolio of world-class commercial U.S. shipbuilding designs that we can sell to our customers. That's the easy part. The Maritech Program provides fifty percent of the money. We work with shipyards and design agents who develop a basic market work analysis and pick a market in which they feel they might be able to compete. We provide the money for them to develop or even buy a foreign design if they need a design because they don't have the capability of developing it. So that the design piece is an easy part. As I think Taylor Jones mentioned in his presentation right now there are 28 projects on the way to develop designs to sell. So that at the end of the first few years of the Maritech Program, we'll have in the U.S. portfolio 28 world-class working designs that we can now take out to the international community and sell. And just as an aside, if you don't have something to sell, you're not going to get anywhere. We've had shipyards go to international conferences where they have even set up booths, and they talk about our workforce and our facilities. That's not what these customers are interested in. They want to know what you've got to sell, how quickly you can deliver it and what's the cost of it. That's all they want to know. If you don't have something to show them, they'll kick the tires and say "I don't like that" and "change this," but you're not going to sell them anything.

So the design piece, that is, developing the design, is a very, very important piece of the puzzle. And so we have 28 parts of that piece underway. And the second piece is the process improvement piece. The projects that we have underway are also looking not only at developing the designs, but, as we set up a contract or get an agreement with a shipyard to develop a design, the other piece of the processor the puzzle comes into play. That is, we also want to develop a world-class building process so they can show us how they can build that ship competitively. In order for us to compete, we've all heard it said, we have to re-engineer our processes, we have to totally rationalize the design production process in this country. A key element, and probably the key element, is that we have to build ships quickly. We have to be able to sell ships, but it's not enough just to meet the schedule. The key is offering a schedule that's better than anybody else in

the world. The competition right now builds a ship in a period of nine to 12 months from contract award to delivery. In this country, at the good yards, we are still talking about a two-year period from contract award to delivery. So the whole thrust of this thing has to be on reducing the cycle time from contract award to delivery.

In many people's minds, the most important factors in improving a process, as we've heard over and over again, are cultural changes which have to take place in this country. We have to convert from a cost-plus mentality, a mentality of selling man hours to the Navy, and convert to a business practice concept when selling these products to the customer in the least time and at the least cost. In order for this cultural change to take place, there are a lot of things that have to happen. Management is going to have to totally restructure the way they do things. We've heard from the experts here that it is a key element of what has to be done. Another thing we have to do is team up with the suppliers in order to get the time down. We have to know who our suppliers are before you can sign a contract. So that we don't have to, typically, go out with RFPs looking for suppliers to respond and get the low cost. We have to have these guys in our pocket when we set up with a customer and sell a ship.

Now, the other thing is, we've got to have the shipyards actually cooperating in selling. I just came back from Germany, where I picked up some ideas on how things are done overseas. While the German shipyards will compete against each other for international orders, when one of them wins, all the other German shipyards become a consultant to that shipyard. They do not want to see a German shipyard deliver a bad product or deliver something over cost, because that affects the national image of that country. So they're all in it together. They all try to help each other. We have to sort of start talking like that in this country, with shipyards looking to teaming together, working together and selling almost as "U.S. Shipbuilding, Inc." Right now, the shipyards are all against each other, competing for a little piece of the market they're trying to get and hoping, I think, that they will be the last U.S. shipyard and then they'll have a captive market.

And then the final element is this whole workforce element that we're talking about, empowering the workforce, and pushing the decision-making down to the lowest level. That's going to take, as we're hearing more and more about today, totally different relations between labor and management. We're trying hopefully, with the Maritech initiatives, to sort of help those things to take place. And you all must realize that this is a government program. The government can't impose any of this stuff on anybody. Anybody can stand up here and say, "This is what we should do." The only thing that can motivate the industry is sort of the promise of increased

market share and increased profits. And that's gonna be the driving force to help us make the right changes.

Maritech is really trying to work with the industry to make these cultural changes and to try to get a foot into the international market door. To help accomplish this, we're providing 50/50 cost sharing. Any shipyard that comes to the table with a proposed approach to getting into the marketplace, for example, they want to develop anew design, they want to look at re-engineering a process (we would like to have them look at re-engineering the whole culture between labor and management as part of that), those are the people we're trying to fire. It is the guys that come in with an innovative approach to try to get into international market place. We are encouraging teaming. We are saying to shipyards, "Don't come in by yourselves." We want them to come in with suppliers as part of the team, with future owner/operators, possibly, as part of the team, with technologists as part of the team, and there even should be union as part of the team. We haven't actually asked for that yet, but may be, in the future, we should add the labor piece as part of that. So what's happening is, in many cases, the technologists at the shipyard are adding, as a team member, a foreign yard. In most cases it's a European or an Asian yard or a Japanese yard. The next presentation this morning is the BIW presentation. Bath is a case in point that we're using as a model. BIW teamed up with Kvaerna Masa Marine. For technology exchange, as part of their project, they sent a whole team of people from Bath over to Kvaerna Masa in Finland. They came back actually worrying about the labor-management infrastructure there and how they work together. They re-engineered their processes, and soon we'll hear about a pretty innovative labor agreement they signed recently.

So what's happening as a result of this teaming is that we are seeing that there are some cultural changes starting to take place. It's because there has been an association of some of the best yards in the world, who try to learn how they do it, and what they're finding out is that it's not the technology, it's not the processes, it's not the workers, but it is these cultural things that they have to adopt. I think that it's having a major impact on our industry right now. In summary, let me just say that Maritech initiatives right now have been very successful to date. There's a lot of activity underway right now. As I said, there are 28 designs that we've developed and facilities. modernization efforts are underway in a variety of yards. In fact, two of them will be funded with Title XI loan guarantees. Three more are investing in excess of \$30 million apiece of their own money in improving their facilities. So I think there's a strong commitment on the part of most of the U.S. shipyards to get into the international market. I think there's a strong commitment on the

art of most U.S. shipyards, that they realize that they have to make a cultural change and they have to sort of work with the labor side as well as the supplier side and everybody else get into it.

That is the initial thrust of the Maritech Program. The long term vision of the Maritech Program is really to try to get ahead of the competition and stay ahead of the competition. In order to do that we need to do more. What's missing right now is leadership from the industry side. The projects we have underway at Maritech right now are individual products with individual shipyard teams. What we don't have is sort of a national level, senior management level oversight of Maritech trying to set the vision of the country, trying to sort of set the vision of what we want to achieve and how we want to achieve it. I'd like to see a senior level advisory board advising me as a Maritech Program manager where we should be going, how we should be achieving that vision. But I look at this as the CEO level at shipyards, I look at it as a CEO of key suppliers, and as labor being part of that. And anybody else, including maybe the regulatory bodies. We need to have a sort of a total national vision that everybody buys into. Then Maritech, with these dollars that the President and Congress have put on the table, can spend that money wisely to achieve that vision. I think that's the missing link right now. SP-5 is a good example of a collaborative effort and the NSRP is a good example of a collaborative effort, but what we don't have is a CEO level of involvement in these things at the national level. That's what we're looking for.

And to wrap it up, maybe we'll see, as a possible outcome of this conference, with some advice on how to best establish this national level entity, maybe you want to call it a National Shipbuilding Council or something, Revitalization Council. I also look for feedback from this Workshop over the next couple of days on recommendations on how Maritech possibly can further assist the efforts that you're addressing the labor management issues, the human resource innovation issues. We have the dollars to spend and we want to work with you. Our goal is to become internationally competitive. And I look forward to reading the results of this workshop for recommendations on how we in Maritech can assist you.

## THE NEW LABOR AGREEMENT AT BATH IRON WORKS

Delivered by Jay Bailey, Vice President, Manufacturing, Bath Iron Works Corporation,  
and Brian Canwell, Treasurer, Lodge S6 of the International Association of Machinist  
and Aerospace Workers

Mr. Bailey

I am very pleased to be with you today, and I would like to introduce my partner in this presentation, Brian Canwell. Brian is a member, an official of our production and maintenance bargaining unit, which is represented by Local S6 of the International Association of Machinists. He is also a local union officer. One of the things that we do at Bath Iron Works is, we discuss the labor agreement jointly. In every case,

we or some of the members of our staff do it together. I'm going to take the first piece of it and then we're going to switch back and forth as we go. I'd like to make just a couple of opening remarks about the presentations we heard this morning and some observations on those presentations. Their content had to do with things that we ought to do to become competitive: things that we ought to do to save the industry. I was making some notes of some of the key words used in those presentations and rated our effort at Bath Iron Works on such things as empowerment, top level commitment so forth, and as I went down the list, I think that we've scored 100% so far. That's where we are at Bath Iron Works. What we're not going to do in our presentation today is tell you what you ought to do. We're going to give a little bit of score card of where we are. This is a status report of what we're doing. We will be highlighting a series of events. Notice that I did not use the word "steps" which some people would interpret as getting from where we were to where we are. I hesitate to use that word because it implies that we had a very well thought out plan and knew exactly where we were going to go. And I don't believe that's true. We got to where we are because both of us, labor and management, had an understanding that we needed to do something very different; that we needed a joint commitment and that we

Mr. Bailey joined Bath Iron Works in May of 1967 as a Structural Fitter, He has held positions in Overhaul Project Offices, New Construction Planning and Production Control organizations as well as various management positions in Manufacturing. Mr. Bailey has served as BIW's Vice President of Manufacturing since March of 1993. Mr. Bailey has attended Ricker College, Gorham State College and the University of M a i n e .



needed to trust that we both had the same goals at heart. We developed that first; we then went from there.

So I'll tell you a little bit about the shipyard to kind of set the framework. Bath Iron Works is a 111-year-old corporation. We currently have approximately 8,800 employees in the total shipyard. Local S6 of the International National Association of Machinists represents our production and maintenance employees. We have 450 in another local represented by the International Association of Machinists for our clerical and planning staff. We have the Independent Guards Association and an independent organization representing the draftsmen. To round out the total, we have 2,000 management or salaried employees.

What do we do for business? We're currently in the destroyer business, Arleigh Burke class destroyers, and we have a backlog of 12. Our background is not just Arleigh Burke destroyers. Over the years, the shipyard has built a variety of vessels - everything from Americas' Cup yachts to fishing trawlers to roll-on/roll-offs, tankers, containerized cargo ships, FFGs, Oliver Perry Class frigates, Aegis cruisers, now Aegis destroyers, to round out the group.

As Bob Schaffran indicated, we have entered into teaming arrangements. We received approximately \$5 million in matching funds from ARPA and we've developed a teaming arrangement to bring innovation into the shipbuilding organization. We teamed with Kvaerna Masa in Finland and also Mitsui Engineering in Japan. We're doing that for two reasons. One is to get ourselves into a dual-use shipyard arrangement where we can build world-class service combatants and we can also position ourselves to compete in the world market for commercial shipbuilding. We're also finding that this arrangement is allowing us to implement new technology, process redesign into our current shipbuilding contracts and we are well on our way to realizing great gains and benefits from that program.

A little bit about the background of our corporation, our roles and responsibilities. Traditionally, we have had an adversarial relationship with the unions which led up to a protracted strike in the mid '80s. We seem to have put all of the emphasis on arbitration development through grievances. Over the years it ran from 20 grievances a month to upwards of 100-150, which generated a backlog of approximately 1,000 arbitration cases. Some would say that we've enjoyed that relationship for many years. Certainly, events occurred in the late '80s and into the '90s which started the change process. In the late '80s our owners changed we got a new president, Buzz Fitzgerald, and our major unions became affiliated with the IAM. We think that those things occasioned the beginning of the change.

Mr. Canwell

Some time before the NLRB's decision in the DuPont case, the company had discussed with the union the question of becoming involved in teams. The union had some difficulty with it because we had really no voice in selecting the union representatives. They were selected by the company and, in our view, that would simply be a token gesture-you put a person on the team and you have union involvement. We said we wanted to be involved in these teams, but we want to be involved in an equal partnership having an equal voice. The DuPont decision was one of the things that helped precipitate the change in how we looked at teaming.

We signed the teaming agreement on July 22, 1993, which outlines how we go about our process of forming teams. The union would have an equal voice and an equal partner in those teams. After that decision the International put out a white paper on teaming. The International's position prior to the DuPont decision was, teaming was not the way to go because it was associated with TQM programs. Because those programs traditionally did not allow labor to pick who represents it on the teams, the IAM advised steering away from that. But after the DuPont decision, the International did put out a white paper and said teaming is all right if you do it the right way. Buzz Fitzgerald BIW'S President, and George Kourpias, President of the IAM, agreed they would team on the ARPA Commercial Shipbuilding Project. We jointly went out to Ecology at work seminars, which consisted of people that had entered into teaming situations. Most of the ones that we heard from were in the automotive sector. They did say that it did work but that it was quite a change. Most of them went into the teaming venture because, for them, there was no real other choice. Competition from overseas was killing their prospects of being successful in the

Mr. Canwell began his industrial career as an Apprentice Maintenance Mechanic in 1981 at Bath Iron Works and completed his apprenticeship in 1984. During his career as a union representative at B.I.W. he has served as Shop Steward, a member of the Contract Review Team, member of the Complete Negotiating Team and, since 1994, the Contract Interpretation Team (CIT). The CIT is a joint labor management team which oversees the entire High Performance Work Organization. Mr. Canwell also serves concurrently as the local unions' Financial Officer and as an ASE Certified Multi-Crafted Mechanic.

future, so they tried doing something different. We brought some of their ideas back to Bath, Maine.

George Kourpias did something that was rather a landmark. He addressed every single Bath Iron Works employee and stood on the podium at all the different facilities that we have and addressed each employee, as did Buzz Fitzgerald in saying that it was time to end our traditional ways of solving problems, or rather, not solving problems. It was time for us to set aside our differences and focus on what we had in common and retain these high skilled high paid, high benefit jobs that we have at Bath Iron Works.

In April of 1994, the company and the union met and exchanged objectives. Interestingly enough we had at least one objective in common and that was to reduce the lost time problem that we had in the shipyard. We had an enormous lost time problem in the shipyard, both parties recognized it, and at that meeting we exchanged our proposals for our objectives and both sides felt we could, working together, achieve the objectives that both parties were looking for.

We set teams up to negotiate, but not in the old traditional manner where I give you my proposal and go off and you give me yours. We said that we would sit at the same table, we wouldn't do caucuses, we'd openly discuss anything and everything that we needed to learn from one another, and we would do it in a teaming process. We established the Complete Negotiating Team and they were responsible for the final review of all the other teams' works that came up to that level. The Complete Negotiating Team felt that one of the things that needed to happen, initially, was to make our old labor agreement fit into the world as it really is today. It was a lawyer-written throwback to the 1950s. The only analogy I can think of to describe it is, it was like an old Christmas tree that they took some balls off, hung some new balls on, rewired the lights and tried to make this whole antique agreement work in a modern day world. As you may have guessed it didn't work too well.

There was, however, some good information in it. We decided to set it aside and establish a team whose responsibility was to rewrite the labor agreement in simplified language. That team was the Contract Review Team. The Contract Review Team, in the course of writing this agreement, also realized that even though they were a smaller and more efficient group, the immensity of the task was so great that they would need help. This was true not only because of the size of the task but also because its complexity required needed expertise. There were seven people on the Contract Review Team, each of whom had quite a bit of expertise, but not in all areas to be addressed. Accordingly, the Team was empowered to get people that had expertise in

specific areas to come in to make recommendations. We called those Issue Support Teams. They would develop their recommendations and give them to the Contract Review Team (CRT). The CRT would meet with them after they had completed their work. If the CRT had any questions, it would ask them. It would make whatever modifications, if any, were needed, and then the CRT would pass that work up to the Complete Negotiating Team, which would have the ultimate say on whether to go forward with the language or not. Senior Company and Union leadership was very active in participating in the negotiation process. We had the Directing Business Representative and CEO of the company on one of the Issue Support Teams, which is something that in traditional negotiations, doesn't happen very often. It was a very interesting process.

Mr. Bailey

**N**ow I want to cover, briefly, the actual process of how the teams worked and how we got started. The first thing that we did is, we identified a number of managers and represented people across the company that we thought would be involved with Issue Support Teams as well as the Complete Negotiating Committee and the Contract Review Committee and we put them into two days of team training. That training was specifically formulated to target upon reaching our joint objectives. We used the objectives that we were bargaining with and used that as a basis for that training. We have jointly negotiated the goals, set goals in that training and developed a true commitment to teamwork, to produce a labor agreement that promotes maximum efficiency and preservation of jobs. We came out of that teaming with that statement. That's what we were there for. That's how we were going to bargain this contract.

We did share objectives. Each side had a list of objectives. In the bargaining process, we laid those out in written format to each other and we described the basis of those objectives. This is something that I'm sure that you in the room, who've been involved in negotiations, would never have done, if you haven't worked in this manner. We understood going in where we each wanted to go. We had the opportunity to discuss that openly and honestly with each other. In my opinion that is a very crucial piece of this process.

We did establish some ground rules that were very important at the time and have shown themselves to be very important over the long haul. One of the most important was a communication piece. The fact that we're here today doing a joint presentation is only one element of that. As we were discussing and bargaining the agreement that we have, we were

communicating jointly to the represented people in the workforce as well as to management. Each and every week, as a new chapter in the contract was developed and came to a level of agreement that would be voted on later on, it was handed out as a preliminary or a draft to all represented people. And we handed that out at the gates to each and every BIW facility at the beginning of the shift. Both managers and union officials alike. We communicated, as well, at the end of the process. We were down to the last week before ratification when we finally handed out a complete package with all the chapters in the contract. At that point, we went into sessions where we drew in the workforce in groups of about 125 to 225-225 might have been the largest group -at various conference centers in the shipyard and we discussed those chapters with them. We jointly filled the stage with managers and union officials alike. We walked through the final package page by page by page. And we were expected to and did answer hard, tough questions from both sides. 'What does this mean?' 'How am I going to do that?' 'How's this going to be implemented?' And again, for those of you who have been through the process of bringing a negotiations to closure know, the real work begins after ratification. Implementation of the agreement.

In this case, the implementation of the agreement really began a week before. We had a lot of questions that we had to address. So we did that. Another very important ground rule that we adopted was that all of our decisions would be based on a consensus. Consensus means that each party involved with the decision supports that decision. If you are a part of the decision making process you don't have to like it and you don't have to officially vote that you are a part of that decision, but you must support that decision. So all our decisions are made by consensus. Not two thirds, not by majority, but by consensus.

The cards are up and there are no hidden agendas. It just gets down to the basis of trust. Again, there are no hidden agendas, no hidden motives. In all of our acts today, I believe that we have tried very hard to be open and honest and communicate up front. This is what we're going to do. You may not like it, but this is what I'm going to do. That's the approach that both sides take and that works very well for us.

Although Brian has already described the process of negotiating, let me repeat. We didn't pass proposals back and forth. We didn't caucus. We had complete open negotiations in the the room. Nobody left the room during the whole process, whether it was an Issue Support Team, the Contract Review Team or the Complete Negotiating Team. In each case there were open discussions.

Mr. Canwell

**A**mong our principal objectives were the production of maximum efficiency and the reservation of jobs. We also wanted to make the following philosophy statement a part of the contract:

We that believe everyone wants to be part of an organization where people are empowered to be successful,, are responsible for their actions and share in the rewards of being the best. By creating an atmosphere of trust and respect, through education and training, open and honest communications, commitment, and problem solving, we will achieve our goal of maximum efficiency and job preservation to the benefit of all.

**Because of that, we incorporated teaming into the contract. We said that teaming would be the rule not the exception.** We would work those teams though the consensus process which Jay described. Consensus doesn't mean that I'mgoingtoget everything that I want. It's going to be a line somewhere between the middle on hard issues where Jay might feel one way and I might feel the other. Through open discussion and laying out the information, you somewhere in the middle of the road, something that you both can live with.. Sometimes that line will move to what some people would perceive to be a **little bit further on one side of the road or a little bit further on the other, but once you come to consensus and support the decision you go out and you do just that.**

**Our joint responsibilities were pretty much established in the contract, I have to say that management basically laid the books open to the union and said, "What ones do you want?" We took quite a few of them. We didn't get into the administration of discipline issues, for example, because that's something the union does not do. Even though the union approved the hiring plan, which is another one of the joint responsilities, the union doesn't get into the selection process.**

**The issue of job security was such a change that it created quite a culture shock, especially for a yard which had operated under an old archaic agreement that, like I said, was born back in the '50s. Somewhere around the 1976 time frame, the company and the union negotiated some language changes but those changes, did not amount to rewriting the contract. It was more a matter of trying to add bells and whistles to what existed. Because of the radical change, the big fear from the union side resurfaced. Whernver union people hear "increased efficiacy" or "increased productivity" it always translated to, "Where is my job going to go?" "Where am I going to go?" We felt that through this process we had crafted we could guarantee job security. There is an escape clause in that job security language which basically says that, if the government pulls your contracts or if a hurricane comes up the coast and wipes out the yard, all bets are off. In one of the examples I've used during the contracts presentations to the**

people on the deck plates, I refer to a fairly new facility we have that produces our pipe and tin work over in East Brunswick. Not far away is a Naval base where P-3 ORION controls the submarines. I said, well if the P-3 ORIONS crash into the EPMF, we will probably experience some layoffs.. Other than that there is job security for the life of the agreement through the process of multi-crafting. As people leave through attrition, which is about half a percent per month or about six percent a year, people can become multi-skilled. The company doesn't have to go out and hire, let's say, a pipeline mechanic, which results in an overage of another pipeline mechanic, and lay him off. You can eliminate that process and let people attrit out. As they attrit out, you get the multi-skilled employee who a take up the slack in the workload.

Another big issue for the union was the IAM pension plan. Our old pension plau had been something that had been largely overlooked in the past. The membership was always saying, want what I want now. I don't really want to bank a whole lot on the future; the future will take care of itself." We felt, however, that in the interest of employment stability, it was time to address that long overlooked issue. The result was the adoption of the IAM Pension Plan, which resulted in approximately a 68% increase in our members' pension benefits.

We also addressed the development of a high performance work organization. Once again, that was basically what allowed us to have some job security language. It was something that was near and dear to us as union representatives. That type of provision addresses that type of security. You've got to be innovative in ways of tackling the job security issue. A high performance work organization which is the natural result of that multiple skilled process is how we get there.

Training is probably the biggest issue in implementing a labour agreement such as this one. We **have two big ticket items of training. One of them is the associated function; the other one is multi-crafting. Simply put, the difference between the two is this: an associated function will allow a single dimension craftsman, such as a pipefitter, to perform service work which would otherwise require the assistance of a service craft. In other words, rather than stand idly by while a service employee such as a rigger or a burner is dispatched to and does assist him, the single dimension craftsman will now have the ability to perform that service work which, heretofore, he was prohibited from doing. He can now go out and keep his process going to complete his job. The multi-crafting process allows a mechanic to not only keep his own job going, but he can go out and work for others. He might be able to support, say, another mechanic in a craft that, before the new contract, was not his own. It allows a mechanic to perform all the work of another craft separately from his former one, if need be. The training under the**

associated functions, currently, is about 98 or 99% done. The multi-crafting is one that we are still working on today as we move multi-emit mechanics into the model.

Our guiding principles are these (1) we're committed to teaming through the consensus process. Teaming is not the exception now, it is the rule. What we've said in this agreement is that there's no on and off switch to union participation. (2) We operate with mutual trust and respect. There will be no surprises. At BIW the best thing we do is build ships; the second best thing we do is build some pretty good rumors. In the old days, if I heard that Jay Bailey has said this or that in front of a group of employees, as the union rep, I would go out, get on the phone and stir the pot, so to speak, trying to find out why he's doing this, and what's going on. I would probably never stop to think that may be the first place I should go is to Jay Bailey to ask what went on. That's the type of relationship that we're building. Before you get all exercised by leaping to conclusions, go ask the people, go talk to the person face to face and see what the answer is. If there's a problem at that point, you can try to work to resolve it. It may take some time, but that's what is necessary to keep the process going. Don't make assumptions or accept rumors. Talk to the person in question. (3) We will work openly from the same point by sharing all information. (4) We are committed to a willingness to through issues with the purpose of reaching agreement which, that one reached will, be honored even when times get tough. That's something that both sides had done through this agreement. (5) we will dedicate the time necessary to make this process work. Once again, there's no on and off switch. You've got to either be in and committed or not. And (6) We will base our decisions on the well being of all employees.

In the implementation process, as Jay said earlier, we made communications that affect the labor agreement a matter of primary concern throughout the process. What we said was that, in order to eliminate communication problems, both parties would have to sign off and both parties would have to communicate. As Jay said we did conduct communications and briefings jointly, management and union both with the entire work force. After contract ratifications, we had contract training and briefings jointly presented to all managers and union stewards. That was an in-house program that we put together. We then went away and formulated negotiations. we had about a year's worth of time that we put into it. It was very well received. It was more of an education to both parties on how to react to a problem-what's the right way to approach people as well as how not to approach people. We actually had examples and people worked their way through it and it was very good in its demonstration of those purposes.

The following Implementation Teams were also established the contract Interpretation Team (CIT), the Area Governing Committees (AGC) and the Classification Support Centers (CSCS). The



CIT'S sole duty is to interpret any contract questions and jointly answer them. There's no Human Resource Department in the company anymore. The AGCs are the first step in any high performance work organization. Any implementation problems that arose would go to these folks, the AGCs. They would use the information handed down from the Contract Interpretation Team to help guide them through those implementation problems. They also look at and assess the need for the associated functions and determine initial multi-craft requirements.

Classification Support Centers encompass management and union stewards. Their process is to do the polling for the associated functions and multi-craft opportunities. They also establish the guidelines that classifications would use for things like out of town job assignments, overtime policies and things of that nature.

And lastly, I'd like to mention that President Clinton came up on labor Day because he heard about the work that we'd done. He came up to visit because he thought that we were on the right track to make American shipbuilding work once more.

*Mr. Bailey*

**B**efore concluding our presentation I would like to take a moment to explain a little bit of the mechanics. Our labor agreement includes a section, Chapter 4, called High Performance Work Organization. And that organization is managed essentially by the AGC and the CSCs. Through this agreement we reduced the number of classifications of workers from *68 to 25*. We developed 27 jobs called associated skills, which each of the core classifications can take onto complete their process. The AGC sorted out the jobs by area, e.g., process, fabrication, pre-outfit ways instruction and water construction. The AGCs' responsibility was to identify the associated skills that most efficiently matched **up with the now 25 core classifications in their area. We assigned those to those people who would volunteer for those associated skills. They also had a task of identifying what combinations of work classifications made sense to join in order to give the workers the opportunity to become multi-crafted. In some areas, like pre-outfit, where we had electrical components installed by an electrical group under the old contract, it made sense to have shipfitters, for example, multi-craft into electrical core classification because then they could shipfit their iron work and install the electrical component work as well. That was an area where it made sense to do that sort of thing. The AGCs play a very significant role in a high performance work organization.**

## OSHA UPDATE AND THE NEW MARITIME ADVISORY COMMITTEE

Presented by Lawrence L. Liberatore, Director, Maritime Standards and Programs, OSHA,  
Department of Labor

**M**y presentation today will deal with two subjects: anew OSHA and the Maritime Advisory Gmmittee. Have you heard about the new OSHA? *You* can **raise** your *hand* if you have. It's a spin-off on the old cliché, "I'm with OSHA; I'm here to help you." I know you've all heard that befbre. This time we're probably more sincere about it than we have been in the past.

Seriously, the President made a big preaentation a few weeks in Washington, DC, on a site Visit to a small sheetmetal company, where he anmmced what the new OSHA is. I'm going to walk

**you through what all that means and some of the buzzwords that you're going to be hearing for the next year or two.** And it's a different directon, a different complexion from anything you've seen from OSHA in the past.

You're going to hear words like padnerships, you're going to hear reinvention re-engineering, stake holders. These are words that you've heard before probably, through Vice President Gore and the National Performance Review. That is all an integral part of where OSHAand its policies and philosophies will be going in the next few years.

I'm going to talk about three areas: the new OSHA partner common sense regulation, and the in tert to measure **r e d t a p e .**

**As to being a partner, you're going to see a very different OSHA on the front line, so to speak. When OSHA comes to your doorstep, you're going to see a different OSHA.**

**Secondly, as to common sense regulation, I think we have achieved this already and we've been there for a couple of years in the maritime industry. Accordingly, I don't think this is really that**

In his current position, Mr. Liberatore's responsibilities include: the devdopment and promulgation of OSHA standards that apply to shipyards, boatyards, marine terminals, and longshoring operations and the management of the Marine Advisory Commitee. Mr. Liberatore began his career in the field of oecupational safety and health with the state of Maryland in the early developmental years of that State'S OSH program. He also worked in the OSHA Philadelphia Regional Office and the National office in various positions. Mr. Liberatore graduated from the University of Maryland with a Bachelors Degree in Business and Public Administration.

dramatic for you all because I think we have been doing just what the President says we should be doing, and that's working together.

And thirdly, measuring results. We're talking about having an impact on saving lives in the work place and not merely trying to handout citations or penalties and that sort of thing.

Enforcement will take a new slant. We are talking about partnerships in creating employer incentives, as opposed to traditional enforcement. You're going to see a lot of incentive programs; a lot of experiments. I'm going to give you some examples of things that we've experimented with in the last year. In the coming months and coming years, however, you're going to see a lot of talk about incentives – 90% of these incentives all revolve around the safety and health program. One example is what Bath Iron Works is involved with in the Maine 200 Program. Another example is the focused inspections in the construction industry.

If you have a safety and health program, you're going to benefit from a number of unique programs that OSHA's going to offer in the coming months. Most of these programs all require that you have a safety and health program. So if you have one in place, an effective one, not just a paper Program, then you'll be able to get into things like this maine 200 program inspections if you meet certain criteria. You'll also be able to get into a focused inspection which will **look at where the most hazards are. One example of what I'm talking about is a success story at Boise cascade.** I'll touch a little bit on the before and the after. When OSHA went in there in 1989, they were hammered with a \$750,000 penalty. But there were some good things that became of it. They **established a safety and health program and, as a result, serious injuries and illnesses dropped 98%,** annual Workers' compensation costs dropped 85%, from \$1,393,498 to \$210,767. OSHA believes, and I think most of you believe, that if you have a good safety and health program, it make sense. It Can save lives and it can save money on the bottom line.

In the matter of common sense enforcement. If OSHA does come to your job site and identifies hazards and you fix them immediately, then you're going to get automatic penalty reduction. They are doing this in our Parsippany, New Jersey, area office. When they send out citations to an employer, **after they've been there for an inspection, there's a form right in there which states, in effect that, if you agree to fix these things right away, give us an abatement of that, then we'll knock the penalty down** right away. You won't have to fool around with lawyers and informal conferences and letters and all that kind of stuff.

Another example of a success story occurred in the matter of lead poisoning in construction workers. Under the old OSHA philosophy, we'd do an inspection and after accumulating all the

documentation, we'd attempt to achieve abatement through fines. Our targeting was also only on a hit or miss basis. Under the new OSHA we have formed partnerships with the New Jersey Health Department and the New Jersey Transportation Department and developed a compliance assistance program. After this program had been in effect for six months to a year, the workers with blood lead poisoning dropped from one in four to one in @ in Department of Transportation related jobs.

The experiment that has gotten the most press for OSHA over the last year is the Maine 200 Program. OSHA met with the State of Maine and received site specific workmen's compensation data. By the way, this type of program won't work in every state because that information is not readily available in every state. In Maine, we took the companies with the 200 highest claims rate and we sent a letter to them and said 'We're going to target you for inspection unless you develop a safety and health program and show us that it is effective.' The overwhelming feedback that we have received so far has been very positive. It's an experiment that we implemented this year. In the past, would go into a construction site and do a wall-to-wall or gate-to-gate, and we'd talk to every subcontractor, look at every process, at every crane, hoist. It was simply not a good utilization of our resources. We treated good employers the same as we would treat bad actors. OSHA's new slant focuses on where the majority of the hazards are occurring - falls, struck-by, caught-in and electrocutions. This is intended to get the most bang for our buck, our limited resources.

A lot of you think OSHA is a very big organization. We have, at the most 1,000 inspectors all across the country. And that's it. It is not a lot when you consider that there are 6 million work sites. Contrast that with the mining industry, where there are 2,000 or 3,000 mine inspectors - one for every mine. What we're saying to you under the new approach this year is, "you is," You have to take the high road with OSHA and get into these incentive programs, or you can take the low road, with the traditional enforcement of OSHA. Showing up at your step." You must realize, of course, that that approach available to us to use. If we have bad actor, if we have employers that continues to flagrantly not follow basic safety practices, they will be subject to the full force of OSHA. I think you've heard the terms "egregious cases" and "million dollar cases", penalties of \$50,000 for each instance, for each employee. That's still there and OSHA still has that bull whip.

But if you want to take the high road, we have a lot of other things, a lot of other incentives that you didn't have in the past and these will be emphasized.

The common thread between everything we're doing this year is the safety and health program. Safety and health programs are the foundation for the common sense regulations. I'm not going to stand, however, and give you a lecture on what a safety and health program is. There are

basic elements. For example, you've got to have employee involvement and partnerships. We talk about working with stake holders, working together to solve common problems here. Common sense regulations means weeding out the nonsense. These are some of the things that OSHA is in the process of doing in weeding out the nonsense. In our general industry standards, we have regulations that deal with the safe transport of explosives. DOT has similar regulations. We're going to do away with ours. There's no sense of having two of them. And that is just one example.

As part of this process, OSHA, along with all other government agencies, had to submit to the President by June 1 an analysis of their existing regulations and how they can do away with duplicative regulations, out of date mm, obsolete, confusing and silly regulations that aren't enforceable. And that report will dramatically change some of our current regulations. We are intent on weeding out some of the nonsense. As a further example, we have found that, by changing the language or enforcement of just three rules (gas cans, the 911 number and first aid kits), more than 1,000 unnecessary citations will be eliminated yearly. There are things there that we can deal with administratively, which means that we will not have to go through the Federal Register.

The other part of this new OSHA is an attitude or a culture-type thing. In the past, we looked at inspection quotas, penalty goals and paperwork violations. In the future, we will have a different thrust. We want to measure "impact. We want to reduce injuries and illness in the work place. We're going to correct dangerous situations and we want to have effective work site safety and health programs implemented. so we're not going to be looking at process, we're not going to be looking at numbers so much. The question we will be raising is, "Are we having a real impact in the work place?" The bottom line is that we'll be looking at results.

**OK, let me kind of sum up. I know I'm going to be repetitive here, but I must stress this point: everything that we're going to be doing in the next two years is all based on a safety and health program. If you have a program, if you have an effective program, then you will be the beneficiary of many, if not all, of these incentive programs. That will be one of the high priority standards that we will be working on – a generic safety and health program standard.**

**You all have done a lot more than any other industry because of your SP-5 Committee activities. So you're ahead of the game. The new OSHA will be focused on real problems. The bottom line is reducing injuries and illnesses, not the number of inspections, not the number of citations. We're going to be looking at things like Maine 200 and Focused Inspection Programs and balancing enforcement and assistance. I think you're going to see a greater involvement through these incentive programs, through consultation programs in the various states, to provide technical assistance to you,**

through training and other methods. All this gets to measuring results, not red tape. We want to have a positive impact in the workplace.

That concludes the "New OSHA" part of my presentation. What I'd like to do now is to tell you about something that I've been much involved with and that's the Maritime Advisory Committee. MACOSH is the acronym for the Maritime Advisory Committee for Occupational Safety and Health. You may have heard of another advisory committee, SESAC, which is the Shipyard Employment standards Advisory committee. When President Clinton came into office he was looking to streamline government. By Executive Order he did away with a lot of non-statutorally required advisory committees. That's what SESAC was and, as a result of the executive Order, we closed the door on SESAC. OSHA then revitalized its National Advisory Committee, which represented all industries, and our intention was to have a maritime subgroup be part of that. Well that didn't happen. The charter of the National Advisory Committee was to look at the big picture. The reasoning went that, if we set up a subgroup for maritime or shipyards, we had to do one for longshoring, we had to do one for the chemical industry, for shoe factories, whatever, so it just died. Nevertheless, a couple of us looked at the Executive order and noted that it referred to "permanent advisory committee" "as having to be reduced. It didn't say anything about temporary project committees. So I asked our lawyers, "What is a temporary project committee?" Their response was, "Anything less than a year." So I redid a charter and redid a position paper that said we should establish this advisory committee. The matter was then pursued, through channels from assistant secretary Joe Deer to the White House, and we were able to sell it. Accordingly, the Maritime Advisory Committee is not a permanent advisory committee. It is chartered for one year. If we're successful, however, and it's an effective committee, as I know it is and will continue to be, then we will recharter it every year.

This advisory committee is a little different than the old advisory committee. SESAC was just for shipyards and its charter was just for standards. This one, because I wanted to get the support of the entire maritime industry, covers shipyards and the longshoring community. The other significant difference is, the old committee was just for standards. I thought that while we have the opportunity here, let's go for it all. This committee's charter is three areas. one is standards, two is enforcement and three is training and education. so this committee has the opportunity to affect all OSHA programs, not just standards.

We had our first meeting in march, we met just last week and we're scheduled to meet again in September and November so far our focus has been to tidy up some loose ends from what the previous SESAC committee did on standards. We had a very excellent meeting last week on training and

education. I hope to get into enforcement and some of these partnership type agreements, arrangements, programs and experiments by the September meeting.

We have a real good mix. We have small shipyards and large shipyards on the committee, including for example, Bath Iron Works and Atlantic Marine. Chico McGill is on the committee representing the IBEW, and the sheetmetal trades is represent by Charles Bradford. I think we have all the key stake holders for the maritime community, including the Navy, Coast Guard, MARAD, NIOSH and a representative from the State of Washington. We have a real god group and we have some real good chemistry. Everybody is willing to work and work together. Everything that we're doing is right on the money as far as the new OSHA is concerened .Every thing that we 're doing is a partnership oriented teamwork type of thing. A major part of the discussions that we've had the first two \_meetings have been safety and health programs. I'm real pleased with what we've done so far and in the direction in which we're going.

## JOINT SAFETY COMMITTEES

Presented by David Amos, Manager, Labor Division, National Safety Council

**L**et me start off by saying that I'm in the unique position of having come into my job with a prerequisite of having been a union representative for thirty years to qualify as a manager. But it was kind of unique with what I do because I'd coordinate the activities for the collective bargaining agencies that belong to the National Safety Council. We've got about 500 international local unions that participate in this particular group, as, for example, the International Associations of Machinists and the IBEW, both of whom have been mentioned here today. These folks all participate, along with a lot of management counterparts. Some of you folks are sending some folks there also to do some things with the National Safety Council.

I'm going to start my presentation by talking about why we need to simplify the things we've done in the safety and health arena; why we need to change the way we've done business. Remember, I am somebody

**who comes with a labor perspective. In 1973, I was appointed to an OSHA committee. OSHA had only been around three years when we appointed joint safety committees and I still thought OSHA meant "Our Savior Has Arrived." I thought that this was going to fix all safety and health problems. The supervisor I work with said, "Oh no, that means, 'Oh Shit, Here he comes Again.'" Now, we had different views on where this thing was coming from. Well, we appointed these safety committees and we said, "Folks, you're going to have work together to get this done." Well, I came out of an atmosphere where I was told that, if it was a supervisor, they didn't know diddley squat. Whatever it was, they were wrong, and this was the mentality we grew up with. This adversarial background.**

Mr. Amos has been a member of the United Auto Workers for over 30 years and has been actively involved in many aspects of safety and health from the labor perspective.

During his employment at Mack Trucks, Inc., he served as the labor representative on in-plant safety and health and emergency response teams. He also served as a regional trainer on these subjects for the United Auto Workers.

Mr. Amos is a certified emergency medical technician and firefighter II under the National Fire Protection Association guidelines and a hazardous materials incident commander. He has served as Red Cross chapter chairperson of the CPR and first aid training activities and carries an instructor and instructor training certification. He is also an instructor in CPR for the American Heart Association and National Safety Council First Aid Institute.

In September 1993, after many years of volunteer service, Mr. Amos joined the National Safety Council as Labor Department Manager.



That's *all* changed now, thank God. We can work together. We can buy the hatchet not in each other's backs for a change. As you know, the National Safety Council is the official repository for costs and record information. The costs that we're talking about the costs of accidents with deaths or disabling injuries for 1993, amounted to \$407.5 billion. This is direct costs of accidents and injuries, folks. Direct costs. This is what we get cancelled checks for. And we wonder why we're not being competitive in what we do in this country. When we put the multipliers into it, when we look at the indirect costs of these particular situations, we can have a six-to seven-fold multiplier. We can't do business this way anymore. Look at the numbers that we're dealing with. The cost of workplace accidents for 1993 at \$111.9 billion. We consider part of what we do the cost of doing business. We used to look at these workers' compensation costs and the cost of accidents and injuries as apart of our cost of doing business. Medical costs have escalated, comp costs have escalated legal costs are going through the ceiling. Can we consider this a cost of doing business anymore? No. We heard previous speakers say, "somewhere we've got to be able to recover this money." If we can't get a bigger piece of the pie or can't get another piece of the pie, we've got to find another way to control it. What better way than through team work?

Managers are taught to manage dollars and cents of their particular business operation, right? we look at the bottom line. Don't we have to deal with dollars and cents? That's where we come from. the labor folks on the hand I was part of that group - didn't care about the costs. We simply didn't want our members getting hurt or injured on the job. So we're coming from 180 degree opposite perspectives. But what's our goal? What's our goal? We've got to walk the same road, don't we? How can we do it? How can we do it? Do a good proactive safety in health program where we find these hazards first and fix them before somebody gets hurt.

I've been an instructor for the Safety Council for nine years. In our Joint Safety and Health class, we talk about OSHA record keeping. The purpose of the OSHA Act is to provide protection for the valuable resources this country, the working men and women that have made country what it is today. One of my personal thoughts at that point in time was the OSHA Act does not fulfill it because of the bureaucratic way it was written. When we contected a citation we didn't fix an anything so we still have People exposed to a hazard. Is this good for people? No. Is it good for an employer? No. Because we still have problems, but it was the bureaucratic system. I was so glad to see some of these changes being proposed, because it's - I won't go as far as to say common sense - but it's a logical approach. It's an approach we can all live with as we go along. The Statistics prove to us why we need to make some changes in the way we've done things.

How many of us have safety committees in our workplaces? Paper safety committees or real Safety committees? What we need is real safety committees in our workplaces. How many of us have heard this slogan, "Safety First"? Safety First. Do we believe that? Do we believe that? If you do, I've got some oceanfront property out in Arizona that I want to talk to you about after the program. It's not realistically possible to have safety first, folks, is it? What's the main emphasis in our business? What do we do? We produce, don't we? You guys build ships. There are places where they make widgets and there are places where they make cookies, But we produce a certain product. Think about the total quality aspects of the things that we heard this morning. And we've got to produce a certain amount of product or we don't make money, we don't survive. If the employer doesn't survive, the union doesn't survive. So, as union people, we've got a vested interest in seeing that this place survives also. It's our paycheck folks. More now than ever, labor organizations recognize this.

So we talk about the see concerns. Is it feasible that we can balance three things, safety, productivity and quality, an equilateral triangle, balancing these three issues in our workplace today? None of the an is more important than the other. They're of equal importance. We've got to build a product we've got to build a quality product, we've got to do it safely. That's a feasible situation that we can do. Not this Safety First pie in the sky, that won't fly. Because it's somebody's myth, it's not reality. And this were we get problems with some of the things that we've done before. We've got to do things that are realistic. We go in and we try to sell somebody, "Hey, safety is important." Safety doesn't sell itself for several reasons. Because, number one, it's not equal to the other things. You go to your production manager or your production superintendent and try to tell him that safety is more important than getting that ship out of the yard. What is he going to say to you? After they throw you out? "No!" It may be equal to, but it's not more important than. So we've got a few myths that we've got to de-bone. What about this factual data? How many of our workplaces know exactly how much money we're spending for the cost of accidents and injuries in our workplace? Do we have a good handle on that, do we realistically know what these things are costing? Are we charging these back to the ones that are responsible? We might want to look at some of that. We'll talk about accountability a little bit further down the line, because that's a part of it. How many people feel that this thing is not going to happen to them? What we've actually got to achieve is a state of mind where people say that safety is a way of life. National Safety Council's definition is as follows:

'Safety is the control or elimination of recognized hazards to reach an acceptable level of risk.

We can't eliminate all risk, can we? It's a risk every day when we get out of bed. But we can certainly control these risks and these hazards, if we recognize them. Who sets this acceptable level of risk? Who sets that level of risk? You do. You've got a lot of that in yourself for what you do. Remember, it's OK to say no, folks, if it's an unsafe situation. But we need to promote that message to all of our people, supervisors and bargaining unit people alike. It needs to become a mentality, a mind set that we're dealing with. Folks like OSHA the other regulatory people, they also help us set this. Our company helps set it. Our insurance carrier helps set it. These are all players admitting to this acceptable level of risk. We can compromise that thing.

For years we used to react. We didn't put any money into a safety program; we did a knee-jerk when something happened. We came back reacting to whatever it was and when accident costs escalated to a certain point over time, we put more money into it. In a proactive safety and health program, you've got to put money up front. You put money up front into things like training and education. We heard three previous speakers today talk about the fact that we need to be on an equal playing field. Education is one way to get us on an equal playing field. I like to say we're all on the same page of the hymnal. Can you imagine what it would sound like if everyone in this room were singing a different song? And even if everybody got back on the same page and sang the same song and you sing as badly as I do, it would still sound a whole lot better because we're on the same page. That's the concept we've got to get into in our safety and health programs. We teach the people who will work together and we train side by side. Our job is to move this proactive program forward. The trends today are things that we've already heard some of these other people talk about. But we've got to take safety and health out of adversarial arena. There's no longer a place for "Us" and "Them" in safety and health. It is "We." "Team" is not spelled with an "T". There's no "T" in "team." We've got to get to that point where it becomes "We", as a group, moving forward, basing our program on facts, not emotion-on facts-and we manage this program from that standpoint. We must develop an attitude that, if it's unsafe, we're going to fix it. It doesn't matter who brought it up or why they brought it up, if it's unsafe, fix it. That's not a hard philosophy to go with, is it? Not at all. Move to the arena as that join us. Working together. Team process. Team process is good.

What about the Safety committees of the 1990s? This is what they look like

1. They will involve more people
2. They will have policymaking input.
3. They Will have economic input.
4. They will be a focal point for training and
5. They Will be non-adversarial.

Where do we get some of these things? Well, we got them from a survey that we did for OSHA. OSHA asked us a couple of years ago to do a survey for them. What do we see that is going to happen with this? Well we see the safety committee activities are going to involve more people. What did we hear about the inventing, reinventing OSHA? We need employee participation, don't we, folks? Wow, this sounds like that the National Safety Council has been teaching and preaching for quite a few years. Maybe somebody finally sat up and took notice. But we also have facts that this works. We know that it works. We've been in a lot of locations, we've been in a lot places with our training programs, we worked with people, we've done our programs everywhere from a little cookie company in the South Side of Chicago with 56 employees, a mattress manufacturing operation in Nashville, Tennessee which it was able to take their incident rate from an excess of 19 to under one. When we went in and started to work them, their incident rate exceeded 19, they were like 19.2, they finished last year at .97. Their safety committee has adopted a proactive approach. That is, find the hazards, do job safety analyses, good educational aspects, let everybody know what's going on and everybody has a responsibility for safety. Can we all say that happens within our organizations now? Probably not. We do know some organizations where that happens. And some of the more progressive organizations we deal with are making it happen.

Does it work in big operations? Yes, indeed. Absolutely. One of the biggest organizations that we work is this that between the IAM and Bath Iron Works. They're working together. We're working with another partnership - the International Association of Machinists and Boeing. The National Safety Council is the exclusive training agency for the International Association of Machinists and Boeing's safety and health program. They have put together concepts in all of their workplaces that they don't even call them committees, they call them Joint Site Teams. Every Joint Site Team dresses the same, casually. Supervisors and managers no longer have to wear ties. And they all wear the same burgundy casual jacket that says "IAM/Boeing Health and safety Institute." God, it sounds like that Japanese concept, doesn't it? But we are all in to the same thing and it's kind of hard to tell the one player from the other. If our philosophies are the same, you shouldn't be able to tell the difference between a labor person and a management person. You're going to get the same thoughts and feelings regarding safety and health from them. The neck tie shouldn't make any difference.

These are some of the things that we're seeing that are happening as these organizations come around. There was a question asked earlier, when they were talking about the concept with Boeing. They said, "Will this work with more than one bargaining unit?" It can, and we'll tell you a little more about that later on. Before we get to that, though, I want to talk about some of the new approaches

that we're seeing. Before, we used to blame people for everything. We'd blame people for everything that went on. Point the finger, accuse somebody, place blame. What was the old joke, "Who can I blame this on today?" They're the kind of things that we used to do. Well we're doing things differently now. What are the goals of our health and safety program? First it used to be that it created the appearance of things, now it's actually involving people and getting with it. What did our total quality approaches teach us? Who's the most knowledgeable individual we've got in our workforce? Who can tell us the most about how to do that job? The worker. Nobody knows better than the worker, but for years we've ignored that resource. Whether it be a clerical job, a technical job or whatever, we have ignored that resource. Why? Because we graduated from college, somebody gave us all the brains? They handed me a diploma, but that doesn't say I know more than somebody else. I just got some expertise and knowledge in certain areas. We've let egos play into some of this stuff. We feel threatened sometimes. We've got to get past some of that stuff, folks. The more progressive organizations we know are not playing those silly games anymore. This is my turf, don't you dare come in here. These are some of the old problems that we've had for many, many years. We need to break down those barriers, break down those fences and talk to each other.

One of the words that you heard earlier was what? "T-word." What was the T-word that we kept hearing earning this morning? Trust. Trust. How much trust do we have in our organization? Think about it. Over our years of experience in going off and working with some things, we have developed something we call a "Trust Results Continuum." The very first thing that's got to be in place in any operation if things are going to work is a level of trust among the players in the organization.

When you have a certain level of trust you can move to the next step. And what's the next step? Commitment. Are you going to commit to something you don't have any trust with? No! So we've got to develop a certain level of trust before we can move into this commitment phase. We've heard talk earlier today about how there's got to be commitment has got to come from the top of the labor where there is a bargaining unit and the top of that company. It's got to be real, honest to God commitment. It cannot be phony; it cannot be faked. Do I go in and blast the company for not being committed? No, there's times I've gone in and blasted union leadership for not being committed. As the National Safety Council, we are the independent broker for safety. We're not pro-management or pro-labor. We are pro-safety and health. All we want to know is, "What's the best approach?" In order to get there we step on people's toes from time to time; we have been known to tick a few people off by telling them the way things are.

Once we have commitment the next step is involvement. We need people to be involved. We've got to have involvement we've got to have breathing, functioning individuals in this program. Once we get involvement we start to get activity. When we get activity, we can get some results. And if you're not getting the results in your organization, which is the bottom line that we're looking for, go back through that system and find out what's missing. If you're not getting results, something's missing. Trust. Commitment. Involvement. You get responsibility and accountability into it, you get activity, you get results. That becomes a checklist for you. And you can go back and determine where the problem is within your system simply by asking those kinds of questions.

These are that we're seeing in the new approaches to safety and health. The safety and health program should be reduced to writing for all to see and understand. It should be flexible so as to be able to be adjusted to changing circumstances. It should be a living breathing, real life program as to both policy and personnel and it should always be subject to change as conditions warrant.

Now, what about benefits of joint committees Oh? there's tons of them. People need to feel that they're involved in the program. And beyond that even, they've got to know that they are a part of this system that's going to move forward. That is our ultimate goal. These people know they're part of this process. They have a pride in ownership in what's going on. They're making this thing move forward with the things are happening.

I want to return to the question raised earlier: "Will this work multiple bargaining units?" We worked different, so far, and the three railroads that we worked with are probably the closest things to the multiple bargaining unit situation that you may have in shipyards. The smallest group had five bargaining units. The largest had eight. And we're bringing in Machinists, Electrical Workers, the Brotherhood of Locomotive Enginemen and Firemen requirement, Car Workers, Track Workers, the Brotherhood of Maintenance of Way, Clerical Workers, and others. Critical to success, however, is an honest, sincere commitment from all of the parties. That's the key to making this safety and health program fly. There's no doubt about it. Will it work? You bet it will! It depends, though, on how we structure it and how we bring the right players into this thing. Have we set it up so that, if somebody is not participating in this process, we can move them out and replace them with somebody who will not be a deterrent to the process? Determents come from both bargaining unit and management sides. It's no limited to just one side or the other. We've got those hindrances coming in all over, we've got dinosaurs everywhere who don't want to go with the new flow. The new flow is teaming. We're going to move forward.

For years our safety and health activity, as with many activities within our workplace, was typified by butting heads and fighting. We fought with each other. In today's environment we don't have that luxury to fight with each other anymore. If we're going to fight we damned well better team up to fight the competition and quit fighting each other. That's the only fight we need. From a team concept to fight the competition to see that we can keep our industry viable, to see that we can keep our workers protected, to see that we can keep our company solvent so that we've all got jobs, so that we've all got the things that this country has known for many, many years. They're the kind of things that we've got to work with. That's what we've got to deal with.

Let me address, briefly, what makes safety succeed and what makes it fail. This is what we found over the years. Safety committees are ineffective when they are poorly structured or poorly organized. They are also ineffective if they have no real identified function and/or if they have poorly defined objectives. Poor planning is another reason. You've seen that commercial that says, 'Now, this person didn't plan to fail, but he just failed to plan.' We're all guilty of that in some of the things that we've done with our activities in our workplace. It takes time to plan this thing. We've got to put together a good plan. We've got to put together measurable, attainable roles and objectives. You can't go pie-in-the sky. We're not ready for that. We are not ready to move onto the office sophistication because we haven't gotten over doing the basics right. And the basics in a good safety and health program are, let's find the hazards and fix before somebody gets hurt. Make sense? We can work together in that vein.

One railroad that we worked with runs a line from Carghill over to Pont Huron and then on into Canada. They are now owned by a Canadian national. When we started to work with those folks, we went back and looked at their statistics. They showed 76 percent of all the cars they ran on the rails were run to pay the cost of accidents and injuries. I repeat, 76 percent! Nine months of their year they worked to pay the cost of accidents and injuries. Is there any wonder they weren't making any money? They set out to change the program. We went in, we sat down, we met with them, we talked about how to structure committees. We talked about how things needed to be set up and we talked about accountability in the system. Are we holding people accountable? We should be. Everybody should be held accountable. Management people have a responsibility, bargaining unit people have a responsibility. The OSHA standard says that the employee SHALL follow the rules and regulations of the company and the OSHA standards. There wasn't any penalty put in there for it, but, by law, they're supposed to follow them, There is nothing wrong with that. But we haven't made people accountable in

what's going on. We've got to look at that accountability factor. A lot of the places that we see that don't have accountability don't have an effective safety and health program.

This particular railroad set out to restructure things. They put together a three-tiered structure. Now they're in five major locations, they've brought in natural work groups and structured this process together. Any individual can implement a safety complaint or safety concern form at the lowest possible level. And that's where we need to fix these problems, at ground zero. They don't need to rise up through to a committee activity that happens every three weeks or once a month. They need to be fixed at the lowest possible level. It happens down here, fix it down here. Implement the firm and if it's not addressed within 72 hours, it moves to the next level. But they also built in a mechanism where the supervisors are going to be measured in their participation in safety. How many forms did you sign off on and how many bypassed you? You're being measured on part of your safety performance. It now makes a little different effort as to why that person should become involved. At the second level, again, it is three days, 72 hours. It could then be moved out of there and taken to the top level, which was the vice president or the president of the company. At that level it was proposed that they can address it at the next safety committee meeting, which takes place once a month. In the first round of training, their general legal counsel, who's also the vice president, said when that timetable that was brought up, "Well, time out. This is not acceptable." A bunch of people cringed, like, "What's not acceptable?" He continued, "If the first level must respond in three days and the second level must respond in three days, then, by God, the executive level will respond in three days. We want our program to be fair and consistent for everybody." Well, I applaud that kind of position from a senior vice president, because he is promoting fairness and impartiality across the board in the safety program. That's what makes safety programs work - a fair and impartial safety program. It's the same for everybody. And really, isn't that the way we want to be treated as human beings? We want fair and equitable treatment from everybody. It's not too much to ask, is it? Safety is a basic need. We could go back into Maslow, and all that. But safety is a basic need and we can fulfill that need with a fair and equitable safety and health program.

What causes these committees to fall on their nose? What makes them die? Anybody have any ideas? One of the big things that make them fall on their noses is when we start playing power plays. Whether it be from the management side of the house or the bargaining unit of the house there is no place in safety for power plays. We go in and talk to people dealing on safety committees and we say, "Look, there's a lot of good things that happen in human resources arenas, there are issues that belong on the collective bargaining table, these things are all pertinent, they're very valid, but they don't belong in this safety meeting". Let's park the excessive baggage outside the door, let's park our excess hats



outside the door and let's address safety and health issues only based on fact. What are the facts? Same kind of things these compliance people from OSHA look at. How many people were exposed? What's the hazard? What's the potential for it? This is how we make our decisions. That's how we can make our safety committee work.

The National Safety Council provides a multitude of training and we're not going to do a commercial. We provide a multitude of training in all areas. We try to match our instructors with the needs of the people that we are training. We did one training program for a company that was a research facility. They had a machine shop and they had a chemical laboratory. And we matched an instructor for them with a labor background who came from a machine shop environment and that would be me, and I brought another instructor in who came from a management environment at 3M in the chemical laboratory. That's the way we did our team teaching for these people. We matched our backgrounds with their needs for what needed to be done. And this is the kind of thing that we try to do, making these backgrounds. We've got to forget the individual personalities. Somebody was talking here this morning when they were asking about consensus, and I heard somebody say about vote sat the table. It's one of the biggest things that will kill a safety committee. God, don't vote. That's a win/lose situation, when you vote. And what happens if we don't get what we want? I'll take my marbles and go home, I'm not going to play this game anymore. We're all human. We've got to take those kinds of things out because they're detriments to us. We've got to strive for consensus, we've got to go for a win/win Then we move forward.

The other thing I want to talk to you about communication. Think about how we communicate the messages that we're getting out. Not so much what we say, but how we say it. The body languages, the inflections. All the other things that we deal with. How many times has somebody walked in to see you with a concern. He had issue and you're busy at your desk and you, "Yeah, come on in," but your head never rises out of the paperwork in front of you. What kind of message are you sending to that person who's trying to bring a valid issue to you? Think about it. Would you want to be treated that way? These are the kinds that we've got to look at, the things that cause our safety programs to die. We send a lot of messages even when we don't say a word. Like one guy I used to work with, he said, "Hey, it's not problem, man. I can go out Friday night, I can drink, I can carry on, come in as late as I want too, and my wife doesn't say a thing, for days and days and days." And we've all been through that route, haven't we? That silent treatment. You know that men don't do that. Psychologically, the men do not do the silent that the ladies do. The ladies do it to the men. Psychologists tell us that. Interesting. You start getting into some of this psychology, it's real

interesting. Think about how we communicate things. Think about how we put our important messages out in our workplace. In the workplace you'll hear, "Well they should have known that." Well how should they have known that? We put a memo out. Well where did you put the memo? Over by the gate. Well if it's like the plant I come out of, you come to work in the "mumble, mumble." People grumble and growl when they're coming in there in the morning and the story about the dead coming to life at quitting time. "See ya, I'm out of here." At best, maybe 5 percent of the population would have seen it at the workplace there. And they tell us that adults only remember 10 percent of what they read so if 5 percent of the people see it and only 10 percent of them remember it, boy, we don't have a very good way of communicating, do we? Think about how we do what we've done, folks. How do we communicate our message? What with one guy Up in New York State, Occidental Chemical Company, he told us that they approach it from a real standpoint - "By God, we go talk to people!" Do you believe that? "We don't put notices up, we go talk to people." This guy happened to be a maintenance mechanic, and he actually talked to people about this thing while he was there. Here are some of the Ways that you can maximize the effectiveness of committee . Let's get everybody involved. Let's use all the key players. Let's keep this thing very impartial. Let's work off of goals and objectives that are realistic and attainable. Things that we can deal with; things that we can work with. Can we make it work there? Sure we can. AT Boeing - I don't to keep going back to them, but they've done an outstanding job - we were out there the first week of May, and we reviewed some of the things that happened, and they pointed out that in 1993 they got 4,500 reports of accidental work injuries - 4,500 reports. They have Close to 200,000 employees and out of that number they got 4,500 reports. That is a very, very low incident rate for their process. But they said, "that is totally unacceptable." Safety's an attitude, a mindset. We're talking about 4, 500 people with some kind of a cut, scrape or scratch, and, to them it is unacceptable. "We've got to do better. We've got something wrong in process, procedure or system that's allowing this to happen, and we've got to fix it." And that goes right back to what a couple people said earlier. We can fix things, we can't fix people. If we're dealing with causal factor analysis, looking at the incidents that are going on, we get to root cause, we open thing up and deal with people, we deal with a good hazard assessment across the board and determine each hazard first, then we can have a successful program. We can quit blaming people because there is something in our process, procedure or system that has allowed this to happen, and this is what we have to fix. You'll also find when you read the OSHA documents, it's the same kind of things that they're pointing out to us that have got to be in our program. Surprise, surprise. We agree 100 percent with what they're trying to do and change the concepts of OSHA. The ball is in your court. We know there's

a new OSHA coming. We know there's some changes that are coming down. You can deal with the old OSHA and enforcement or you can get on board the bandwagon form steam process, something that really works and ultimately will save your company a ton of money and the cost of accidents and injuries, will improve morale in your organization because people are part of that process. It's not something shoved down from on high. It's not something that's being given to them and told they have to do it. They help make it happen. They're a part of the process. The choice is yours. The leadership of your organizations have that choice to make. What message are you going to take back? A gain the ball is in your court.

# THE INTERACTION OF THE AMERICANS WITH DISABILITIES ACT, WORKERS' COMPENSATION AND THE FAMILY AND MEDICAL LEAVE ACT

A Panel Discussion by

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Paul Heame, President, The Dole Foundation

Mr. Postol

**T**his is how I suggest we proceed. I'll spend the first 20 minutes trying to give all overview on the ADA, workers' Comp and Family Medical Leave. I represent the employers' perspective so, if you want to analyze what I say from a union's perspective or a worker's perspective, just turn everything I say 180 degrees and you've got it right. Jim Ellenberger and I have been on panels before and he, obviously, represents the union's point of view; and Paul Heame represents the disabled community's point of view. In many ways the points of view are the same - at least, we haven't killed each other yet. Although on the first panel I ever spoke on with Jim, after I spoke, he got up and pointing to me, he said, "Lawyers like that are just the problem with this whole system." And our appearance was in front of 260 insurance company executives. I thought to myself, "What a great endorsement."

Mr. Postol's practice concentrates on the defense of employers in employment litigation. He is a member of the National Association of Manufacturer's Labor and Employment Law Advisory committee and is listed in who's Who In America. Mr. Postol has written over 100 articles on labor law issues, including a text entitled The Americans With Disabilities Act - A Compliance Manual For Employers (American Corporate Counsel Association 1993), He has successfully litigated over a dozen cases before the United States Court of Appeals and two cases before the United States Supreme Court. Mr. Postol received his undergraduate degree in engineering physics from Cornell University and his law degree from Cornell Law School, both with honours. He was a member of the Board of Editors of the Cornell Law Review. He is admitted practice law in the District of Columbia, Virginia, Connecticut, and Maryland federal court, and several other federal courts including the United States Supreme Court.

The three of us did work on the President's Committee for the Department of Disabled. There was a working committee on Workers' Comp and the ADA which the three of us were on. Paul chaired

it, but, actually, Jim and I ended up, I guess, doing most of work. Most of the time we were pretty close on issues and when we disagreed, Paul refereed it.

What I'd like to do is give you an overview, and I'll start by pointing out that the ADA covers, of course, all employers with 15 or more employees. The coverage is every physical or mental condition which substantially impairs major life function; or if you have a record of having such a condition. For example, if I had lung cancer and the tumor has been resected, I don't have lung cancer anymore, but I have a record of having had lung cancer or if I'm perceived as having a condition that is considered to be a disability. As another example, I could be HIV positive, but that really isn't a disability, in the sense that it doesn't affect a major physical or mental condition but of course, people perceive it as being a disability and therefore, I'm covered.

The major life functions are: caring for yourself, performing manual task, walking, seeing hearing, speaking, breathing, learning, sitting, standing and working. The mere fact that you can't perform one job doesn't mean you necessarily have a disability. You have to be unable to perform a class of jobs. And strangely enough when ADA was passed, most of us thought the definition of a disability would be extremely broad. In fact I can remember giving speeches where I advised people not to bother fighting the ADA was passed, most of us thought the definition of have to provide an accommodation. As in many other things, it turns out that I was wrong on that.

The courts have been surprisingly conservative on deciding on what is and isn't a disability. Things like carpal tunnel syndrome one court has held is not disability because, although the worker couldn't do his job of welding there were a lot of other jobs that he could do. Accordingly, the court said that just wasn't a disability. Chronic insomnia wasn't considered a disability. I think what we're tending to see is that the courts are putting a certain amount of squeeze on the worker, in the sense that the worker has to show that he's impaired enough in his work so that it qualifies as a substantial impairment and, therefore, a disability. Yet they're not so impaired that they're certainly not qualified at all. So the courts have taken somewhat of a narrow view of what is a disability.

Once you decide that the person is somebody who has a disability, the next question for the employer is providing a reasonable accommodation which is not an undue hardship to perform the essential functions of the job. So, all we have to do is figure out, "What is a reasonable accommodation, what's an undue hardship and what are the functions of the job?" In a nutshell reasonable accommodation is simply this: Go to the most ingenious plaintiff's lawyer in town and ask him what he

thinks is a reasonable accommodation. His answer will probably provide you with the outer limit of reasonable accommodation.

As to undue hardship, if you're a big company, there is no such thing as an undue hardship.

The meaning of the term "essential functions of the job" is probably one of the more troubling areas, particularly in shipbuilding. Any place where you have a number of workers doing the same job, then virtually nothing is the essential function of the job because any one component of the job could be done by somebody else. For example, if there are ten welders who are all welding at the same place on the ship, then I could assign one of those welders do all the heavy work and somebody who has a disability could be restricted to do the lighter work. On the other hand if I only have one person who could possibly do the task, then even a small amount of the job could be considered essential. For example, an airline pilot. An airline pilot only spends about, what one percent of his time landing the plane and, I think we can agree, that's an essential function for the airline.

So once you've got down what the essential functions of the job, what are the reasonable accommodations I have to provide, then we basically get into three questions. First question is: When I go to hire a worker or do a routine physical, what can I or can't I do? As to applicants, once I make a tentative job offer, I could do a physical exam. More I give a tentative job offer, I cannot.

But the thinking of this was very clever. Congress realized that most employers did physicals on everybody. If they had 100 applicants, they do physicals on all of them and then hire five. The other 95 didn't know whether they were rejected because of a physical condition or because of stupidity or a lack of qualification and experience. Since the worker didn't know why he wasn't chosen he didn't know that he was not chosen because of a disability. So Congress said, "Well, we've got an easy solution for that. You can't find out what the disabilities are until you make them a tentative job offer. Then you can do your physical exam. If, however, you withdraw the tentative job offer, it will be clear that you have withdrawn it because of the disability." That would be like putting up a big red sign that says, "Go to your lawyer and go past Go and collect money."

For employees, I cannot do a physical unless I have a need-to-know basis. So I can't routinely say, "You know, Jack looks a little sick today, I think I'll do a full physical on him, HIV positive testing, everything. Let's just see how Jack's doing today." So I have to have a need-to-know basis, but it is really common sense. If a worker is out because of bad back, when he comes back to work, you have a right to do a physical exam to make sure that he is physically able to do the job. On the other hand, if he went out with a back injury, you can't test him for HIV.

There are a few exceptions. One is illegal-drug testing. Congress has declared that testing for illegal drugs is not actually a medical exam (although you have to pay a doctor to do it), therefore, I can do that at any time. Also, I can ask questions about job performance and do testing as far as ability to do a job. An example I always like to use is the telephone repair person who shows up in a wheelchair. I cannot ask that person why he's in a wheelchair, because I'm asking about a disability. I cannot ask what is his medical edition? But I can say, "Here's a telephone pole please climb up the telephone pole." I can do that because that, in fact, is what the job requires. I'm asking the question in terms of job performance.

The next issue goes to when I can exclude a worker because of a medical condition under the ADA. Well any medical test or exclusion must be because of what is called "job-related" or "business necessity." What that means basically, is that I have to show that, because of that medical condition the worker cannot safely perform the job. As a practical matter, that means that they can't safely do it, they can't do the essential functions, even with reasonable accommodations. OK. So I've got to be able to show that, no matter what accommodation I give the worker, there's no way the worker can do the job. That is a very tough standard and it's meant to be a tough standard. A lot of employers say, "Well, I can't have the person do the job because there's an increased risk of injury." In effect virtually all of us have an increased risk of injury. Some of us have bad eyesight. Well, I'm more likely not to see an object coming at me and die. I'm also slow and overnight and therefore, I'm doubly unlikely to see something coming at me. And so, virtually every employer can say, "He cannot do the job because there's some risk of injury." Congress turned that test down and required a showing of a significant risk of substantial harm, I repeat, significant risk of substantial harm, based on medical judgment on the best available objective evidence. What that means is I can't have Dr. Quack come in and say, "Looks like Larry's a big substantial risk. I have an M.D. after my name and, therefore, I've got the ADA requirements." Rather, it's got to be objective evidence, which ultimately would be for a jury to decide. The decision has to be based on the worker's current condition. Substantial risk probably means more probable than not. In other words, I claim that I've got some arthritis so there's increased risk of a back injury. I have to show that it's more likely than not that, with my arthritis, I'm going to end up with a new back injury - which, by the way, there's no medical evidence that would possibly support that. And I'd have to show that the risk cannot be eliminated through reasonable accommodations. If I can show that, if you give me a back support, if you give me a helper, if you give me a crane, I don't have a significant risk of injury and therefore, I can't be excluded.

The one safe harbor, if you will, is if any Federal or State law has any medical requirement that's consistent with the ADA then of course that's, per se, a business necessity. So if the Department of Transportation wants to say that airline pilots have to have 20/20 eyesight then that cannot be second guessed. Keep in mind that is if a Federal law requires it, not if it's a guideline. It has to be a requirement.

Now let's consider interaction with the union. Part of the trouble is that many times there are things in the collective bargaining agreement that interfere with a possible accommodation.. For example, the seniority clause. And so I've got a light duty job, firewatch for example, firewatch for welders. Who do I give it to? Do I give it to the worker who's been there 35 years and figure, "I've worked welding 35 years, now it's my turn to sit on that stupid bucket and watch other people." Or do I give it to the welder who happens to be two years into the job, gets a bad back and now he or she can't weld. And obviously the ADA idea of reasonable accommodation is going to interfere with, or at least be in conflict with, the seniority provisions of the collective bargaining agreement. Or maybe I'm an electrician and I have a bad back and I can't be an electrician anymore. So my employer says, "I'm going to transfer you to the Tool Room." Everyone says, "That's great but the union says, "Wait a second. You're an electrician you've got seniority as an electrician not as a Tool Room clerk." Obviously, we've got a problem here. The ADA unfortunately, didn't give us a solution. All Congress said was, "The collective bargaining agreement is a factor that has to be considered in deciding what is a reasonable accommodation." Well, I don't know what that means, "to be a factor." I mean, either the person with seniority gets the job or the person who is disabled gets the job, sort of an on/off situation. I think in real life, however, if a union and an employer are willing to work together, they can reach compromises. One approach might be to set aside a certain number of jobs for disabled workers even if it means going outside the collective bargaining agreement. I think, in most of these situations, you'll find that if an employer's not greedy and the union's not greedy, you can usually work something out.

When the union says, "Hey, that's employer's problem, it's not my problem," and the employer says, "Screw this collective bargaining agreement we're going to do what we want," that's when the lawyers do really well because they end up with a lawsuit. My experience in these kinds of lawsuits has been there are only two people who win and that's usually the two lawyers.

A lot of employers have light duty programs. I'm a big fan of light duty programs because it reduces workers' compliability. The ADA requires you to be a little more selective in how you administer your light duty program. What a lot of employers used to do to avoid worker's comp was to



put the employee in the elevator running the automatic elevator at a rate of \$10 an hour. The employer's position was, "We don't have any workers' comp liability because the worker is working for the same wages." Of course, we have somebody getting paid to run an automatic elevator but the comp people feel real good because they don't have any comp liability. The production people don't feel so good about it, but that's OK. The ADA sort of changed that a little bit because it's one thing to avoid workers' compensation costs by putting somebody on light duty. But if you have a light duty program you can't restrict it just to workers' compensation people. If I get in a car accident or if I have a personal bad back injury or if I have a personal heart attack or if I'm an applicant and I'm already beat up, how can you limit your light duty program just to people on workers' comp? The ADA does not differentiate on the source of the disability. They treat a disability as a disability whether it's from a work injury or a personal condition. So, what I've told employers to do, and what I think smart employers do, is have a light duty program so people don't get workers' compensationitis. That is a condition where they wake up every morning and say, "Wait, I get a check, I don't have to go to work, I don't have to listen to my idiot boss, I can't be fired (you can't be fired from workers comp) and it's tax free." You don't want people to get used to that system. One way to do that is to have a light duty program. The solution, so you don't get taken to the cleaners, is really threefold. One, use realistic wages. If you have someone running an automatic elevator, pay them \$5.00 an hour, don't pay them \$10.00. Two, don't keep people on a light duty program forever. There are people who don't mind cleaning goggles at \$10.00 an hour forever. They, "Why should I go back to the ship and weld when they've got me cleaning goggles and paying me \$10.00 an hour?" The fact is if, by five, six months or a year, someone has not recovered from a back injury, they're not going to recover, and you're just going to have to address that issue. And three, you can have incentives to get people off a light duty program. For example, in addition to getting realistic pay you can take away their health benefits. Say to the individual, "Look, if you're going to be in our light duty shop, you get no benefits." And then, surprisingly, a lot of people recover from their injury and go back to their regular work.

There are some employers that have taken a blanket position that they don't have duty. It is beyond me how they can do that, because light duty, basically, is job restructuring as the ADA requires. Not to mention that it is actually stupid because they end up paying workers' compensation. But if you are one employer who doesn't believe in light duty, I am sure that you are violating the ADA as well as every rule of financial sanity that I know of.

That's ADA in a nutshell. It is a simple statute. If a person has a disability, you've got to give him reasonable accommodations so that he can do the essential functions of the job. You cannot discriminate against people because they have a disability.

I'd like now to turn to an overview of workers' comp. Workers' comp is simply a no-fault system. Most people realize that, but sometimes it's just hard to sink in. It doesn't matter how silly, how foolish the worker was. He could be blindfolded, remove ten safety devices and go backwards into the lathe and he is not held to be a fault. He collects workers' compensation. But it's also not a tort system. There is a limited recovery. What's a recovery? It's a wage replacement system under which generally, you get two-thirds of your lost wages, tax free (I might note), or sometimes you get what is called a scheduled or presumed loss award. This concept really goes back to the 1920s, I don't know why statutes still have them. Some genius some where decided that an arm was worth 312 weeks, a leg was worth 288 weeks and I forgot how much a foot is worth. If, for example, I lose my arm, I get 312 weeks of compensation, no matter what. If as a lawyer, I lose my arm assuming it's not my writing arm, I don't lose any wages, I can go right back to work, but I still get the 312 weeks. It's also Proportioned. What happens is, most of the scheduled claims involve people who don't actually lose a limb, but they get restrictions. That is to say that if I have a carpal tunnel syndrome surgery and some doctor gives me a twenty percent rating (twenty percent times 288 weeks is 57.6 weeks), I get 57.6 weeks of compensation. The idea is that the schedule is a presumed wage loss, but in reality it clearly does not have any relationship to wages.

The important thing about comp and the workers' compensation system is that it has an implied duty that the worker is going to try to find a job. In that sense, it's perfectly consistent with the ADA. The ADA is telling the employer that he must try to help people with disabilities get jobs by providing reasonable accommodations. The workers' compensation system is set up to get people back to work so as to stop paying them compensation for their lost wages. Of course, you get medical benefits under workers' compensation. Some states, although very few, have what is called vocational rehabilitation benefits. That is, if the worker can't go back to his or her job with the employer, then you have to try to retrain the worker to get back some wage earning capacity. In some states it's required and in many jurisdictions employers do it voluntarily. The philosophy behind it is this: if I've got some dody who is never going to be doing any manual labor again, then I'd better go train him to be a computer science specialist or technician or an electrician or something else where he can get his wage earning capacity back up in a non-manual labor type job. Sometimes it works. Sometimes it's just plain silly. It is not

likely that you can take a welder with a bad back and make him a rocket scientist. What happens a lot of times is that you spend five years of schooling and then after five years, you find out (a) this person isn't going to be a rocket scientist or as I've seen happen repeatedly (and it drives me nuts), is a person gets five years and decides, "Gee that was nice, but I really don't want to be a rocket scientist, I think I'd rather be a lawyer; or a doctor or something else, and the training goes on and on. If, however, you have a worker who really wants to improve himself and an employer who is willing to go along, it can be a win/win situation. Obviously, if the worker does get training, does increase his wage earning capacity, then you can reduce the compensation. In fact, ironically, just yesterday the Supreme Court ruled in a longshore case, that if, in fact, the worker's wage earning capacity increases because his training has increased, even though the medical condition hasn't changed, the employer can still reduce the worker's workers' compensation. Because workers' compensation is a wage replacement system.

Workers' comp and the ADA while they are perfectly consistent, do have different definitions of disability and the reason is because they have different goals. Under the ADA a disability is any condition that substantially impairs a major life function and, normally, it is a permanent condition. Congress designed the ADA not to protect everybody who has a little nick or scratch but to protect people who have a substantial disability, whereas workers' compensation is designed to replace wages. The work's comp definition isn't defined in medical terms as to how severe the medical condition is, which is essentially what the ADA is, but rather workers' comp is defined in terms of wages. A disability is any condition that causes a wages loss, even on a temporary basis. But, as I said, even though the definitions are different, the result is the same. Both have the goal of putting people back to work. The ADA requires reasonable accommodations, which gets people back to work. Workers' comp creates a financial incentive for employers to offer reasonable accommodations because, if I get the worker back to work, then I'm going to save workers' compensation benefits.

Now, the logical question arises: "Well, why doesn't it work all the time?" The answer is as follows: First, there is the problem employee, and they come in two versions. The first is the worker who just doesn't want to work. No matter what reasonable accommodation I provide, I'm not going to get that worker to do the job. Right before this program, the last deposition I took was from a forty-year-old worker on social security disability because of a bad back and trigger fingers, who came into the deposition with a golden tan. He looked like a health food commercial. He was trim and muscular and looked like he could bench press about 300 pounds. I just asked him, "Now, could you do a job as a cashier?" He said "No, I can't handle money, I don't have much strength in my hands and I can't stand

up for more than a few minutes at a time." I said, "That's interesting." And then as I do in all these depositions, I asked him, "What did you do yesterday?" He said "Well I got up and ate breakfast and I rode my bicycle to my father's house." I said "How far is your father's house from your house?" "Oh, nine miles." His attorney was even shocked and said "You mean nine miles round trip, right?" He said "Nope, nine miles each way." So he rides a bicycle eighteen miles a day, but is on social security disability because, although he has enough strength to bend over on a bicycle and ride it and to hold the grips and use the brakes, he doesn't have enough strength to stand for a few minutes and hold money. So you have some employees basically, make a determination they don't want to take advantage of the ADA, they don't want the job back, they'd rather be on comp.

The second type of problem employee is the one who wants his job back but the employer doesn't want him back. He is the worker who's always been a problem and no matter what happens, his work is never going to be within the restrictions, he's always going to complain, you'll never get a day's work out of him. So the employer says, "I don't have a job that's within your work restriction."

Another reason it doesn't work all the time, and this happens much too frequently, is stupid employers. You have employers who just say, "Hey, you're not going to be healthy, I don't want to take you back." And you just say to them (for the time being forget the logical argument that this violates the law), "This is costing you money out of your workers' comp." That employer responds, "I don't care, that's part of overhead that's not my worry."

A third reason goes to the insurance companies. Sometimes it's insurance companies' money, not an employer's money, so the employer is not interested in taking the worker back. Sometimes you have workers' compensation statutes where the liability is so low that it just isn't much of a threat to the worker.

Let me just jump ahead to the Family Medical Leave Act. The Family Medical Leave Act does not have a close connection to the ADA and workers' comp because, while it's based partially on a medical condition, it's basically a social statute. That's to say, we're just trying to say to people that, if you've got something that you've got to take care of at home, you can have a leave of absence, you get your medical benefits continued but you don't get wages. While the Family Medical Leave Act is sort of an administrative nightmare—maybe a better term would be a bad dream—to employers, it really isn't very costly. What you generally find is that someone is away from work and you don't really miss him. All it costs you is some health benefits. My personal view is that this is pretty good, because we're not really missing him, we're not paying his salary, and so he gets medical benefits for a while. Big deal, we

save the salary. Some employers get very excited by it but, to me, it's not a big cost item. At any rate, any employer with 50 or more employees within 75 miles of the worksite is covered by the Family Medical Leave Act. An employee must have worked for twelve months and at least 1,250 hours in that year. The idea behind that is a person can't just go to work for an employer and take leave all summer. You get twelve weeks of leave for birth or adoption of a child for care of a sick immediate family member and an employee's own sickness. That last one is the one that employers really worry about. Employees who basically take time off on a Family Medical Leave can abuse it. The trouble is because you really don't need much in the way of documentation. You could for example, take an hour or two off at a time. Every Friday afternoon about 12 o'clock the employee can say, "I think my doctor is going to prescribe for me that I take the afternoon off and I'm going to take that as Family Medical Leave." Family Medical Leave also covers serious health conditions, but that's a trigger because you can see there's virtually nothing to it. Obviously we're talking in-patient care, which is fine but, if I have a chronic condition, multiple treatments, if I have a bad back and I say, "My back hurts, I've got to take off this afternoon," that's covered by Family Medical Leave. Basically, there's some regulatory requirements which I think are pretty self-explanatory. It's just a matter of just keeping the records and making sure the person fills out the right forms. I don't consider it a big cost item.

Mr. Ellenberger

If Mr. Postol's presentation didn't convince you that there is a need for unions, I'm going to fill that task. I'm not going to talk for very long because I think the best we can get out of discussions like this is to hear your comments, your questions, your real life incidents, and we have really two terrific people here that can answer a lot questions. But I want to talk about these laws and their interaction and some impressions that I have and I'm going to try to do it pretty quickly.

I'm not a lawyer, by the way, so I'm not going to tell you a lawyer joke, but I will tell you this: that Larry and I have appeared on panels before, talking about the ADA and workers' compensation laws. Larry is a very capable and unfortunately, a successful representative of employer interests. I don't mean that in a negative way. I mean successful in terms of beating us in court. But we're both out here really trying to convince our counterparts about the importance of workers' compensation, the Americans With Disabilities Act, and now FMLA. I describe it as doing the work of the Lord. Larry does it in his way and we at the AFL-CIO and in the labor movement do it in the Lord's way. We have these three laws we're talking about workers' comp and ADA and- andFMLA, Larry has done a very good job getting you some basic information about it. The reason we have these laws is really to protect people. Employers get protected by them as well. Workers' compensation is the oldest of the three. In fact, it is the oldest social insurance system in the United States and dates back more than eighty years now. It is a no-fault system.

Just as Larry used a few anecdotes in his presentation, I want to give you a real life anecdote. In 1992, in Axton, Virginia, in a cardboard box factory, a young twenty year old woman was on her tenth day on the job. Her supervisor said to her, "Step it up Loretta," and Loretta

Mr. Ellenberger started with the AFL-CIO in 1972. From 1973 to 1975 he worked in the Republic of the Philippines for the AFL-CIO'S regional auxiliary organization. the Asian-American Free Labor Institute. In 1975, he returned to the AFL-CIO as a specialist on Asian affairs. He was appointed to his current position, in charge of workers' compensation issues, in April 1984, Mr. Ellenberger is a member of the Labor Research Advisory Council to the U.S, Department of Labor, a foundiug-member in the area of unemployment insurance to the National Academy of Social Insurance, a member of the Academy's Disability Policy Panel and a member of the Advisory Board to John Burton's Workers', Compensation Monitor, He is a Certifred Employee Benefit Specialist [CEBS]. Mr. Ellenberger" kagraduate of san Francisco State University, He has written on a variety of subjects, including articles on German co-determination, Japanese Management, international trade union Organizations and social insurance issues.

stepped it up. A piece of cardboard got stuck in the machine she was working with and she stuck her hand into retrieve it. The blade, unfortunately, came down on her as her knee accidentally hit the switch severing her right hand at the wrist. They rushed her to North Carolina where they reattached her wrist. Acutally they fused it, and as a result she'll never have any movement in her wrist. Loretta's company, and their insurance carrier, contested the claim. In Virginia, under this wonderful no-fault system, if you area worker guilty of willful misconduct, you are not eligible for workers' compensation. Unfortunately, it's not just confined to Virginia. And so, Loretta Shelton, who was making a grand sum of \$6.57 an hour, and who was unable to go back to work at that job, found herself without anything because this company contested the claim. Now, as it turns out because this was a serious accident, Virginia OSHA went into the plant and did a little investigation. They found out that the company had removed the guard on this particular chopping machine. On that account, they fined the company \$800. Isn't that wonderful? I mean you hear all this Republican nonsense about this overburdensome regulatory crap in OSHA and this company gets fined \$800 for a machine from which they had removed the guard and it chopped this poor girls hand off. Well that fine was later reduced to \$400 when they reinstalled the guard.

This is a true story. Loretta Shelton, unfortunately, lost her case before the first hearing officer, which was at the Assistant Commissioner level. Loretta appealed that with another lawyer to the Full Commission, where she won by a vote of two votes to one. For relief, she gets two-thirds of her lost wages, two-thirds of \$6.57, and her medical bills. The medical bills were about \$250,000. The company didn't want to give up so easily when it involved so much money. They can buy a lot of attorneys for \$250,000. On the very last day possible, they appealed the decision of the Full Commission to the Virginia Court of Appeals. It languished there until earlier this year when Loretta's attorney said, "look Loretta, you may loose this, even if this goes to the Virginia Supreme Court." In fact, knowing the Virginia system as I do, she probably would have lost. He convinced her to take a settlement which probably just barely covered her medical expenses. This is workers' compensation, our wonderful no-fault system.

ADA is a civil rights law. It has a number of titles to deal with communications, with access, all very important things. But it also has a very important title-unemployment. And what it's trying to do is to get our society changed and to start viewing people with disabilities for their abilities and to remove discrimimtion so that we don't discriminate against people because of their disabilities. And now we have, more recent than the ADA the Family Medical Leave Act, which

is an act that gives you, under certain circumstances, rights to up to twelve weeks of unpaid leave. As you can imagine, people are just falling all over themselves to take unpaid leave every twelve months if you meet certain criteria and your employer has a certain number of employees at certain locations and so forth and so on.

You don't need to know the ins and outs of all these laws. What you need to know is to approach these things from the sort of viewpoint of a reasonable man. What would a reasonable person do under these circumstances? If you have a job interview, if you have a situation where the job applicant or maybe somebody who's been employed there before and who's become disabled, meets the definition of a disabled person under the ADA. What would a reasonable person do in these circumstances? What would a reasonable person do if you have an employee, or you have a union member where you work who needs time off for family or medical leave? It would be my recommendation to you that you approach it from the standpoint of a reasonable person. We don't have unions that protect all workers in this country and Congress can't ignore these things forever. That's why the Family Medical Leave Act got passed. Unions represent only thirteen or fourteen percent of our workforce. Besides the union members, however, there are a lot of employees in this country who need family and medical leave to take care of very serious personal matters dealing with their family and with themselves if they are ill. And so Congress said that they are going to provide people with these rights if they work for an employer who meets certain Criteria.

Well, let me talk a little bit about the distortions that have taken place. It really concerns me as somebody who is trying to view all these issues in terms of changing attitude and doing the right thing and acting as reasonable people. But if you look at workers' compensation-and I spend most of my time on workers' compensation working with our State Bars - it's a pretty sad story. The insurance industry has been planning, particularly for the last six or eight years, and claiming to be losing money and even threatening to withdraw, and some cases they even did get out of some markets. I went back and I looked at a Business Week article from 1978 in which the President of the National Council on Compensation Insurance, the rate making organization for the insurance industry, said that the insurance industry and workers' compensation has been losing money since 1970. This was in 1978. I started dealing with workers' comp in 1984. They said they were losing money then and I know they're saying they're losing money now. What gives here? If they're all losing this much money, how come they're still in the business? It is the most



profitable line in the property casualty field today. There are more insurers in workers' compensation today than there were last year, there will be more next year than there are this year. It is not a line of insurance that people are going broke in. Let's cut out the nonsense. But they've convinced the media, in particular, to present workers' compensation as this system that is being abused and wrought with fraud. There are employees who are riding their bicycles, God forbid, to their father's house, but can't stand up and take change or to make change. There are two sides to every story. I have a bad back and I know couldn't stand up as a cashier. But I can sit down and ride a bicycle. I'm sure everybody has his or her own circumstances.

Just to digress briefly, there was recently an initiative on the ballot in Colorado, where we tried to give working men and women the right to go to their own doctor when they were injured on the job. In Colorado, they have to go to their employer's doctors. Under the Longshore and Harbor Workers Compensation Act, you get to go to your own doctor. In Colorado you go to the company doctor. So we had a ballot measure and the opposition, the insurance industry, and some big companies like Coors and Montford and Johus Mansville, all those companies, poured a lot of money into this campaign to convince the Colorado voters that you're not going to be served very well if you go to your own doctor. You need to go to the company doctor if you got sick or injured. Well, they succeeded.

There's a new industry that's grown in the workers' compensation field. They perform surveillance. They find people and videotape them as they leave their house and go places. Well, they had this tape of this guy who was jet skiing. They made the public assertion that this is what's going to happen if you go to your own doctor in Colorado. As it turns out this particular worker, we'll call him Johnny Jet Skis, had been prescribed by his doctor to ride a jet ski for exercise as part of his therapy. The doctor was chosen by the insurance company. They stopped using that ad.

They talk about malingerers and cost containment - it really bugs me - in workers' comp. They have these people who talk about cost containment - it's no longer loss prevention; it's cost containment. It's after the after the injury, after the illness. You want to limit your losses so that you can figure out away to maybe even harass this poor injured worker to the point he quits, and you can cut off his benefits. This is their approach rather than figuring out how to stop injuring people as away to save money in workers' compensation.

Workers' compensation really isn't a system designed to encourage employers to provide safer and healthful workplaces. This is sort of a big issue that is being pushed by the insurance industry. It's simply not true. We have more injuries and illness today than we had twenty years ago. If workers' comp were some great safety incentive system the 300 percent increase that we've seen in the last decade in workers' comp costs would have resulted in an enormous move to create safer and more healthful workplaces. But it hasn't.

There's been a spate of articles in the press recently about the ADA being misused. That is, it's not helping the people it was designed to help, people with traditional disabilities. Larry sees a guy who's got a sun tan and questions, "How could this guy be disabled? He's not in a wheelchair, he's not walking with a cane, he's not blind and using a seeing eye dog." Just because disabilities aren't obvious doesn't mean that the person doesn't have a disability, as defined by the ADA. In fact I'll bet there are plenty of people in this room who have disabilities that would qualify them as a qualified individual with a disability under the definition of the Americans With Disabilities Act. But the newspapers - and I pick on the Washington Post because it's the hometown newspaper - publish articles which play right into the hands of the people who want to repeal the ADA. There are some people who want to turn the clock back in the Congress. They're saying that most of the cases being filed with the EEOC are people who are employed. Well, think about it. It is not people who are employed but people who may have been employed but who lost their jobs because of their disability, either work related or non-work related. And somehow they are less deserving than the people who are applying for a job. I'll tell you what, the ADA is very important and it's very difficult for an applicant with a disability to know why he or she was denied an employment opportunity. That's why the ADA bans this inquiry into a person's background, including his workers' compensation history and whether or not he has a disability. In workers' comp, I believe that we have created this atmosphere where we stigmatize people who have job injuries and illnesses by implying that they're frauds and malingerers. Now, we're going down this path of stigmatizing people who assert their rights under the ADA as somehow being less than deserving unless they're a traditional disabled person.

The FMLA is another pretty new concept. We have not had a lot of experience with it, but I don't like the look of what some people are saying about it, including some of Larry's colleagues from the defense bar who are consultants to employers. There's one fellow I was on a panel with recently at the President's Committee On Employing People With Disabilities who said that the

FMLA created a perverse incentive for the disabled to remain off work. Perverse incentive. Somehow if you can get to take leave without pay, that's an incentive to stay off work? Somehow that escapes me. Another consultant said it creates a new hazard for employers – an open-ended liability. Another one, and I know you'll love this, said that employers ought to require that all leave taken by their employees starts to toll the FMLA leave. In other words, require that their FMLA rights run concurrently with any leave that they might take, whether it be vacation, workers' comp leave or whatever leave they are entitled to. Make sure that that FMLA clock starts to toll. That's what Larry would advise these employers.

That's exactly why we need unions. Here we have this employer who says, "This is what we ought to do even though it would also burden valuable employees" - I guess he means that valuable employees are those without sun tans who have a legitimate-whatever legitimate means to that employer-need to be off work. Such a policy, he says, is necessary even though a policy of concurrent use of FMLA will likely disadvantage good employees. He would divide the world into good and bad. This is why we need unions. This is why I recommend to our affiliates to our unions to make sure that they address these issues in collective bargaining.

There are potential conflicts, and Larry touched on some of them. I don't think they're all that serious, especially if the parties to collective bargaining say, "Look let's anticipate this before we arrive at this problem. Let's setup a system where we are going to take all these potential disputes to a grievance or to a joint labor/management committee and let's resolve it." That's what we use collective bargaining for.

I recommended that we, in fact, improve upon all of these statutes by addressing these issues in collective bargaining. Such issues would include return to work, that is, under what circumstances and how are we going to effectuate return to work so that it's not viewed as a slap on the wrist or some way to punish employees, which, unfortunately, is very common. Another such issue goes to providing supplemental benefits. Why not negotiate paid family medical leave? Some unions do. Why not negotiate choice of doctor? In a state like Colorado, which provides the employer has the right to choose the doctor, there's nothing to prevent the union from saying, "Mr. or Mrs. Employer, we're asking you to make your choice right now. You let the injured worker make the choice of doctor." And why not negotiate expanded coverage that will stand up in a court of law? Why limit the FMLA to employers of 50 or more? Why limit the ADA to employers with fifteen employees or more?

In collective bargaining we can expand coverage, as we ought to, to all employees, and we can enforce these things through our bargaining agreement. You don't have to wait for an EEOC or Department of Labor to issue a determination. We can provide, in our contracts, for a resolution in any dispute dealing with these issues through our normal grievance procedures and arbitration. We can provide for increased leave. Why limit it to twelve weeks? We can create leave banks. Perhaps some of the unions in this room have leave banks where, if you don't utilize the leave you're entitled to, you can put into a bank so that somebody who really does have a serious situation can use what's in the bank. Restricting the employer's options can be accomplished through collective bargaining. Continue other benefits aside from whatever your arrangement is on health care. FMLA does not require the employer to pick up all the health care benefits. It just requires that whatever existed prior to leave be continued during the leave period. But there's nothing to say that we couldn't negotiate it that while this poor worker is off taking care of a sick parent or adopting a child, that the employer provide better benefits than they had before they were hurt. Obviously they're going to have less money if they take leave. There, of course, are a whole host of other benefits we could talk about, but my time is up.

Mr. Heame

**T**here are an awful lot of different perspectives about this ADA legislation that I could give you but I guess, in my experience, I wear a couple of different hats in talking to you all. I wear the hat, first and foremost, I guess, of a person with a disability. I wear the hat, secondly, of a person who's been in the field of disability and rehabilitation and advocacy for people with disabilities for a long time. And, I guess, the third one, the one I admit to least, Larry, is that I am a lawyer. I've tried to mold these three skills together to try to have an impact on what I think, as Jim has so eloquently said is a need for a change in attitudes. And as someone who was involved in ADA from the very ~ someone who has been involved with the rehab from way back and someone who grew up in that period, I think that I'd like to share with you today, in the brief time that we have, a little historical perspective on where we've been where I think we are and where I would like for us to go, in the future in this great nation for persons with disabilities and, frankly, as a guidepost for the world.

Interestingly enough I don't know if you folks know this, but since the passage of the ADA, which will celebrate its fifth anniversary next month thirty-two nations have passed similar legislation. More importantly than even civil rights, and I say this as an American, as important as civil rights is as a concept, in a nation that doesn't have the concept of civil rights, more important than civil rights is the recognition of persons with disability as part of their population. That recognition is a wonderful side effect of the passage of such legislation.

Just as an aside, a few months ago I was invited to lunch at a place in Washington with one of the aides to the Prime Minister of England Lord Viceroy Heathcliff, or whatever. I was invited to talk to him about passage of a similar piece of legislation in England. And I don't know whether you are aware that the British missed the idea of an ADA in England before the Parliament

As president of the Dole Foundation, Mr. Hearne manages the distribution of Foundation funds raised from private sources to qualified nonprofit organizations operating innovative job training, placement and career advancement programs for citizens with any recognized form of disability. When he joined the Dole Foundation in 1989, Mr. Hearne became the first individual with a disability to direct a foundation for persons with disabilities. He has served as consultant and lecturer for Columbia, Cornell, Drexel Hofstra, New York Rutgers and Temple Universities and the Harvard University Kennedy School of Public Policy. A well - known lecturer on issues pertaining to disabled persons, he has received many national honors and awards for his work and accomplishments. Mr. Hearne received his Bachelor of Arts degree from Hofstra University as well as his Juris Doctor from Hofstra Law School in 1974.

and it was defated by both Houses. It was defeated twice in fact. Your status as a person with a disability in England right now is that you get a card which says you are, in fact under the Crown, a recognized, certified person with a disability. I had a tough time with that and I had tough time at the lunch because I began to talk about civil rights and made a few jokes about card-carrying disabled people. His response was, in effect that the concept of civil rights does not exist in Britain. You colonists had a little tea party about that about 200 years ago in Boston. Civil rights is a very American idea. We want to pass legislation that says what these people can and cannot do. We have a problem defining what it is that they can and cannot do and how that applies to where they would be as members of our society. It's a very important thing. So what we need from you is for you to show us what they can and cannot do. I replied that since there were an estimated 49 million in this country it might take a while, but that that's not the way the ADA was put together. It was put together to give folks the opportunity to do whatever it is that they can and cannot do as an individual. It was also to change the attitude of Americans, frankly, to accept the fact that folks with a visible or invisible disability can function as well as anyone else in society. The result of that meeting and the results in the last six or eight months are that the Prime Minister's come out with a report which will go to Parliament in the fall. They had, in fact, decided that the idea of carrying a card that certifies that you have a disability is sort of like Kate in *The Scarlet Letter* and that there are other ways to do it. Folks with disabilities can have certain rights, and important under those rights that they will have in employment which will be similar to ours, will be something similar to a package of civil rights which we would give them in the context of our Constitution. So progress is being made. There's progress in Great Britain as there is in the 32 other countries in this world that have begun to recognize persons with a disability are recognized as part of the society.

That's the good news. Let's look at some of the history and look at where we are for some of the bad news to balance it out. Although I'm not that old, I am the product of the generation of persons with disabilities. I didn't attend school until I was fifteen years old. When my family would call the school district, the school district would say, 'We don't have any obligation to train Paul. He's too disabled, our school is inaccessible and he won't work anyway. There are plenty of benefits he could lose.'" When I was fifteen years old is not all that long ago. It was 1965. If I said I couldn't vote because I couldn't get into the polling place, that was OK. There was no law to protect me there. I couldn't work and that was OK. And, basically, if you went down a laundry

list of whatever the functions are that you do in your everyday life and that I do as well now too, and that we all cherish, there would be no legal right for me to assert that I even had an identity to do so. You were sort of seen and not heard. And attitudes were the same. It really wasn't until 1973, which was not all that long ago either, with the passage of the Rehabilitation Act, which was passed over two vetoes, I might add, that persons with a disability were given a right not to be discriminated against in federally funded programs. That meant that if there was some federal money that went into the program, they had to look at making the program accessible, they had to look at how a person with a disability could participate regardless of his disability. Many of the concepts that evolved into the ADA really began back in 1973.

Now, by 1973, I was in my last year of law school. And I'd like to give you a quick kind of personal quip about my attendance at law school. When I was twenty, I applied to law school. Do you remember the Educational Testing Service? They sort of ruled the world. You give them money in Princeton and they give you a test. They grade the test and for the privilege of you paying them some more for them they send your grades to college, or the privilege of paying some more they send the transcripts late, and for the privilege of meeting with them in fear that they're not going to take you and your whole career is done. It was the same thing in 1970. I went, in fact, to have an interview. Lo and behold, I was interviewed by the dean of the law school. And I was thrilled because the dean was interviewing me as a prospective law student and that's something that doesn't happen too often. Here's someone who I felt had the best background. He worked in the Supreme Court, had been involved in civil rights in the early '60s and had been involved in Civil Rights Act of 1964. He knew what it was all about. I went into his office in complete fear. He had that desk that has the leather pins that go all the way around it, big chairs, a painting of Lincoln on one side, Marshall on the other and he closed the door. Then he said, "I want to talk to you. Why do you want to go to law school?" And I thought to myself, you know this is going to be pretty easy if all the questions are like this; "I want to be a lawyer." And he said to me, "Well, you're never going to be a lawyer. And I'm going to give you three reasons." He said, "Reason number one. All the courts in the United States are up flights and flights of stairs. You go to the Court house in Minneola (which is the local court house near the school) and you will see that there's nothing but stairs. Even in Congress there's nothing but stairs, all the way up to the front door. So you can't get into court." I thought about it and said "Well, there's got to be a way around that, and for now, I won't worry about it. I'll listen to the Dean because he must know

better.” He said ‘The second one is, if you have a jury trial and you win, they’re going to call a mistrial because they felt sorry for you representing your client. And if you lose, they’re going to say mistrial because your defendant will say that because of your disability you didn’t adequately represent him.’ I think “I’m starting to lose here, but I’m going to hold out for the rest.” He continued, “Third, have you been in the library?” And, I said, ‘Yeah, in fact, that’s where the books are.’ He said, “They run from the floor to the ceiling, don’t they?” And I said, ‘Yeah.’ And he said, “A lawyer’s chief tool is research. If you can’t research,” he said, “then you can’t practice law. You go down to the libraries, you can’t reach above the third shelf. You can’t reach the books. So you can’t research you can’t practice, you can’t go to the courtroom. I’m now going to repeat my question. Why do you want to be a lawyer?” So I thought my only real resource left was humor and I said “Well, how many people applied for how many seats in this class?” And he said, “Three hundred applied for about 100 seats.” I said “And how long is this interview that you’ve given me taken about?” “Oh, at least half an hour.” “And, how many folks have you interviewed personally?” He said ‘You’re the only one that I’ve interviewed, I wanted to have a man-to-man talk with you.’ So I said, “OK SO that’s 200 times 30 minutes, that’s 100 hours. In that case, you’re going to have an awful lot of time on your hands. If I need a book why don’t I call you and you can come down and get it for me.” He grinned and said I’m in.

But there’s a moral here and it’s serious and it’s a true story. And the moral that is serious is that the only thing that dean saw that morning when he interviewed me was my disability. There was no ADA there was no rehab act, there was no legal protection, really, and I don’t think it’s hard for me to assume that that happens today every day.

This morning I met with someone who was doing a study for the Older American Administration on Aging. The country’s great concern is that we’re all getting older. The bulk of the working force is going to be around retirement age at the turn of the century, Social Security is shrinking, Congress is talking cutbacks. This person sits down with me and says, ‘We’re going over how folks in the general population have planned for their retirement. We found your name and have come to talk to you about how persons with disabilities have planned for their retirement.’ And I started to laugh and I said “Forgive me, they haven’t gotten there yet they haven’t gone to work The best way to get folks to worry about retiring is to get them a job.” There’s 49 million persons with disabilities in this country, an estimated 30 million of them are of working age. Seventy-five percent of them are out of the workforce. Out of the 25 percent that are



Working, 20 percent of them are making below the poverty line. So we're talking about five percent of persons with a disability that are even eligible for retirement.

We talked today a little bit about the impact a disability has. If we look at workers' compensation, we look at the ADA, they are designed, both of them, essentially to get people back into the workforce. That's a nice idea, it's good news. The bad news is it's not working. The bad news is that the cost of the impact of a disability upon your average family effectively eliminates them from the mainstream of economic stability. It's a terrible thing that has happened to Christopher Reeve who is going to be a person with a disability. I said to this gentleman this morning, "Let's think about it for a minute. Let's not talk about those folks that are generally disabled like myself, who has been disabled since birth, who try and fight themselves into the workforce. Let's talk about somebody who does everything right or does everything right by the standards of which we say he did everything right. He goes to school, gets a great education, gets a great job, makes a ton of money, becomes famous and popular. Let's just say, hypothetically, he makes a million dollars a year. Let's say, hypothetically, that if he made that million dollars a year in the onset of his disability – poof job's gone! Maybe he saved a million, I don't think those people do, but let's say maybe he saved a million. Now he needs a personal care attendant 24 hours a day, for which the estimates are \$500 to \$1,000 a day. Now he needs to be able to modify his home, making it accessible so he can get in and out of it. He needs modified baths so he can get in and out of that. He needs a special vehicle with a lift on the side. Have it voice controlled. Now he wants his computers adapted so he can use that. It maybe worked out. Now, when we sit down and put all the numbers together, we get somewhere around half a million dollars. That's a lot of money that's half a million dollars a year. He saved that million but his future's not very bright in 1998, is it? Where's the money going to come from? You have to get back to work somehow. I would imagine that coming back would be pretty difficult. So we're looking, actually, at the impact of a disability economically, socially and politically in this country. And we're looking at the fact that you have to come up with a solution for this. Because (a) we need talent, and there's a lot of it out there, and (b) we need not to discourage the growth in that talent, we need to have it inputted into what it is that we all do every day. We're seeing that we really cannot afford to not take somebody on the job because we don't like the package. We've got to figure out that, with a couple of less than costly accommodations and few, perhaps, ways in varying

what we consider to be the job requirements, that that individual is going to be able to be the most productive employee that we have on the job.

Jim Ellenberger is right that the ADA is taking a bad rap from the press. I think that brings us up to where we are today. It's a little absurd, but I've had press call me and say, "The ADA doesn't seem to be working and I think we ought to repeal it. What do you think?" I replied that it was passed in 1990 and in 1995, we're only five years into it. For anybody who knows the law, we are less than one year into the final portion of Title I, which is the employment jurisdictional part, which lowers to fifteen employees or less. I don't think we said, "Let's repeal the civil rights act of 1964," because it wasn't working in 1969. I think we gave it a little more time than that. Some people can make some arguments that some portions are not working now and we're still trying. I think the same argument goes for the ADA. I think people with disabilities are going to have to begin to, if you will, make the impact.

And I'll leave you with one last funny story, which is a story that I love to tell but has a serious moral about where I think we're going to go in the future. I very strongly believe this about people with disabilities as a group, regardless of their socio-economic status, which may vary with their disability. We're all going to be disabled, by the way, one of these days, even me. I'm going to have a disability. There's going to be something that I'm doing today that I won't be able to do as I get older. I would say this that is going to affect each and every one of us. And what we're going to have to do when that terrible day comes is to adjust to it, to work on accommodating it and move on. But we're going to be in charge of that and I think that what we need to do in our society is only create work tools for a person with disabilities to be in charge of their own destiny and for them not to get used to somebody else being in charge. And I'll leave you with this kind of funny story.

I do a lot of traveling and do a lot of talk around the country in fund raising for programs for folks with disability. Everywhere we go there's a new gimmick. As an example, there's a hotel that says that they're the most accessible. The hotels are in the consumer mode and they want to show that with the ADA they really do a good job. I was in this one hotel chain, which I can't mention by name for legal reasons, obviously. It starts with an "H." They said they're the most accessible hotel to a person with disabilities. And I do what everybody does, you give the bellman money to bring up your luggage and you run to your room. You've been in the car, the plane, the train or whatever, and of course, you always check out the bathroom. First you check to see if

you can fit in the front door and, if you can, of course, that's good news. Then there's all sorts of different concepts about what an accessible restroom is about. Some of them have restrooms the size of this room and the toilet is way over in the corner. Others are no bigger than a phone booth. All of them, however, have the towels above your head, which is something I've never been able to figure out. And I'm going around checking it out, when there's a knock on the door. I go to open the door and it's the bellman with my luggage. But, lo and behold, someone, in their infinite wisdom had lowered the peep hole in the door so that a person in a wheelchair could use it. A brilliant idea! However, the person on the other side of the door wasn't lowered. So that all you could tell was the gender of the person on the other side. I looked through the peep hole, the doorman got very red faced, gave me my luggage and ran like hell out of there.

There's a serious moral. No one ever asked. The next time you read an article in the newspaper about the costliness of the ADA and how much it costs, think about how much money this chain spent. I'm sure they paid a consultant a lot of money to advise them and then they pay folks all over the world to put holes in the doors. We're talking big money here that they spent thinking that they were complying with the ADA. I'll bet you anything that no one ever asked a person in a wheelchair, would you rather use the bathroom or be able to see through the peep hole. I think I could give you a fairly rational answer on that. So when you think about the fact that a lot of these arguments are that it costs too much consider what is costly and ask yourself the question "Is it costlier not to do it or is it costlier because somebody said we should have done it that way and we wasted a lot of money doing it?" And I would argue that the real cost is in not doing it. The real cost/benefit is in assuring that we get as many folks back into the workforce and the economic stream as we possibly can, regardless of what or how severe the disability is and regardless of the accommodation that you have to make.

## THE ROLE OF THE AMERICAN WATERWAYS OPERATORS IN THE REVITALIZATION OF THE AMERICAN SHIPBUILDING INDUSTRY

Delivered by Robert O'Neill, Vice President, American Waterways Operators, and Director, American Waterways Shipyard Conference

It's my intent just to give you a bird's eye view of what we do, why we're interested in the NSRP and, specifically, why we're interested in human resources as well. The American Waterways Shipyard Conference is a conference in the AWO, the American Waterways Operators, which is the national trade association for the inland and coastal tug and barge companies. The Shipyard Conference represents small and medium sized shipyards that build and repair steel hulled vessels upwards of 250 feet in length. We have member companies in seventeen states operating 67 facilities.

People ask me all the time, "What's a second-tier shipyard?" I tell them it is a yard that builds and repairs steel hulled vessels upwards of 250 feet in length. And they respond, "Well, that doesn't give me too much to go on." I then kind of try to describe for them, essentially, the fact that we have in our membership, among second-tier shipyards, outfits like Glendale Boatworks and Karatechs in Port Arthur, Texas, that would have 35 or 40 employees. We also have Trinity Marine Group, McDermatt, Bender, BethShip and several others shipyards of that size with payrolls of up to 3,000 employees. So we cover a wide range of yards in terms of their general size. One thing that they share in common, however, is that their main focus is on commercial construction and repair work. Many of our members do have some government work in their portfolios, but it doesn't represent a major part of their business. You will find our members building and repairing tugs and barges, tow boats and fishing vessels. Many of our gulf coast members will build and repair vessels for the offshore oil industry, like, for

In his position with the American Waterways Shipyard Conference (AWSC) Mr. O'Neill's duties include the organization and management of all association activities and services for AWSC. He has served in this position since July 1990.

Before coming to AWSC, Mr. O'Neill served as professional staff member in the U.S. House of Representatives for over fourteen years. First, he was Legislative Assistant to Rep. Dougwgren of Pennsylvania. Second he was a staff member of the House Committee on Science, Space, and Technology. His responsibilities brought him in contact with a wide range of economic issues, as well as business and academic investment in technical research.

Mr. O'Neill is a graduate of Wheeling Jesuit College.

example, crew boats, service boats and seismic research vessels. Many of our members also will build and repair passenger vessels, high speed ferries, passenger ferries, as well as passenger/car ferries. In addition to that, we also have been building gambling vessels as well as short excursion vessels. Many of our members have also been successful in the export arena. We can build boats for exporting, mainly to South America and Central America. We're talking here about military control craft, power barges and fishing vessels. As a matter of fact, the first commercial contract that was let after the conclusion of the Persian Gulf War was given out by Kuwait to Bender Shipbuilding in Mobile, one of our members. That contract was to completely redo their fleet of eighty shrimp vessels. So that gives you some flavor for what type of work our members do.

Second-tier yards, to put it in a nutshell, are very competitive. They've been closely in tune to the commercial market for many years. They have been very competitive among themselves and very competitive within their particular region. And as a result, they've got a very small administrative staff. They are very lean. You're going to find in second-tier shipyards, many times, that the same person that does the personnel records will also be doing the safety portfolio, and at the same time might also be working on some of the estimating. There is a lot of interchange of responsibilities among the administrative staff in a second-tier yard. But they have been through some tough times particularly at the beginning of the 1990s. They are very much in tune to the competitiveness of the commercial market and are always looking and driving hard toward the goals of on-time delivery and in-budget operations. So that, I think, that gives you a view, essentially, of the management philosophy behind many these yards.

What are we doing, or how is AWSC and its members involved in the revitalization of the U.S. shipbuilding industry? And that's a good question. We've taken it upon ourselves to try to be the policy advocate for second-tier shipyards. That is, we engage in advocacy activities on Capitol Hill and with regulatory agencies that will promote sound and fair policies, as well as reasonable Policies, for the U.S. shipbuilding industry. We feel that a good start in that effort is the Clinton Administration program for the revitalization of the shipbuilding industry. That is, I think it's got several features; one of which is support for the OECD Shipbuilding Agreement. We're lobbying very strongly in favor of that. We feel that it levels the playing field and takes away foreign subsidies across the board throughout the international market. We feel that second-tier shipyards are strong enough and are competitive enough that, given the opportunity to get into

the international market, will compete with anybody. That is a very important part of our advocacy program.

Next, we're very supportive of the Title XI Loan Guarantee Program. It sort of fits hand-in-glove with the OECD Agreement in some ways, that is, in providing loan guarantees. We have found, in many instances, many of our yards have been competitive price-wise with their foreign competitors for contracts, but the financing package has always been the Gordian Knot, so to speak and has always been the most difficult thing for our guys to come up with. Many times they can't be competitive with many of the packages that our foreign competitors can offer because of the help they get from their particular government. Title XI provides a loan guarantee that will guarantee 87 1/2 percent of the face value of the loan for a period of 25 years at commercial competitive rates. Lately, that has become very attractive to foreign operators and foreign buyers. We've found that over the last year to 18 months, MARAD has done an excellent job in administering that program, resurrecting it from what we knew it to be back in the early '80s and turning it into a very competitive, but yet very helpful instrumental program that's able to help second-tier yards be competitive for many international contracts. That's worked out very well and it is something that we are lobbying for actively and strongly to continue over the next few months.

We're very supportive also of the Maritech Program. We feel the Maritech Program is one of the best programs to come down the pike, that and Title XI. AWSC, as a matter of fact has its own Maritech project. We put together a group of six companies made up of four shipyards and two supplier companies. We have people engaged in a project called "Penetrating the International Market with Small Ships," and with Maritech's help, that is a 50/50 sharing basis, we're conducting an international market survey. The purpose of that survey is to find out where the promising markets of the next few years are going to be in terms of small ships in the international market. We're going to have Kvaerna Masa Marine come up with two, maybe three, innovative vessel designs that will respond to the market demand that we've seen in the market survey. Then we're going to form an export trading company in which we're going to group together to jointly market our new vessels in the international market. Right now what we're looking to do - probably the way it's shaping up, we just got started - but the way it seems to be shaping up is that we're probably going to be coming up with a new fast ferry design. This is an innovative design for a river/ocean cargo vessel that will be able to climb the rivers in both the inland river system as well as the blue oceans. We could potentially, design a vessel that would take cargo,

let's say steel, from Pittsburgh and without the trans-shipping in New Orleans, take it nonstop down to Vera Cruz, Mexico, and even further down into Latin America.

We also realize that this is a very popular vessel in Europe, particularly Eastern Europe. We see a lot of potential opportunity here. To make this long story short essentially the Maritech Program is something which we feel is very important to helping capture many of the creative ideas that are coming about in second-tier shipyards, making them become a reality in terms of applying a lot of the energy and creativity that exist there.

We also support regulatory reform. Basically, what we want to see is safety and health for working men and women that is applied in a very economic, but not overburdensome, way for second-tier shipyards. We're working very closely, as a matter of fact with the Shipbuilders Council of America, jointly. We're trying to put together some support for many of the regulatory reform efforts that are going on at Capitol Hill these days.

The American Waterway Shipyard Conference is also part of the National Shipbuilding Research Program. I'm a member of the Executive Control Board and we're slowly getting back into the ballgame. I think previously, in the '80s, many of the second-tier yards were involved in the NSRP and then sort of drifted away. Since I've been with the AWSC I've been trying to get us back in the ballgame. I really feel that the application of technology to shipbuilding and for shipyards is going to be something that's going to help us revitalize the industry and stay internationally competitive in the years to come. So you can look for us, that is AWSC, as well as our member companies, becoming more involved in the National Shipbuilding Research Program now and in the future.

We're also working very closely with MARAD, particularly in its marketing promotion program. Tom Harroldson heads up the marketing office there and is helping to identify and disseminate the new market leads in the international market. We're working very closely with him in getting those leads out to our members in order to give them a running start in being able to try and bid on many of those contracts that you're starting to see in the international market.

We're also a sponsor of the American International Shipbuilding Exposition, which will be taking place in New Orleans next April. Shipbuilders Council of America the American Waterways Shipyard Conference, Maritech and a couple other associations are sponsoring it. It is going to showcase for the world the abilities of U.S. shipyards in new construction and repair. There will probably be about 150 companies exhibiting their wares. We're hoping to lure foreign

operators and buyers over to the Exposition next April to get a good look at what we're doing and what we have to offer in terms of new vessel designs in construction and repair. That's sort of going to be an international coming out party for U.S. shipyards. I think that's going to be very important in terms of our long-term revitalization to let the world know that there is now an active, creative and very serious shipbuilding industry back on the international scene. We've got a lot of high hopes for the American International Shipbuilding Exposition next year.

In general, AWSC supports opportunities for programs and policies that support U.S. shipyards. Basically, we don't care where the ideas come from whether it comes from labor or from management, from union shops or non-union shops, from the north, south, east or west. If it's a good idea we want to help promote it. That's how we view ourselves, a policy advocate for the U.S. shipyards. As a matter of fact back in April of this year, we sponsored along with Shipbuilders Council, the first ever shipyard industry summit meeting, in which we had representatives from all the shipbuilding organizations come together for the first time and talk about a common issue agenda so as to move this industry more to a posture of working together and speaking with one single voice on behalf of U.S. shipbuilders. We had a very successful program. We had about six or seven major shipyard organizations represented nationally, as well as local organizations like the San Diego Ship Repair Association Tidewater Association of Ship Repairers, Southeastern Shipyard Association in addition to Shipbuilders Council and AWSC. We carved out of that meeting a policy agenda that we're going to fight for together as a group, as an industry. As I had mentioned previously, the Title XI Loan Guarantee Program, the Maritech Program and regulatory reform are the three major items that we're lobbying on behalf of.

In closing, I would like to explain that I'm a former Congressional Hill staffer, having served with the House Science, Space and Technology Committee, and I'm not from the shipbuilding industry. In my experience in the '80s at the Science and Tech Committee, however, I saw directly the impact of the investment that is made in research and how that can have economic payoff down the road. I was very impressed with that and I'm very impressed with what I see in the U.S. shipbuilding industry these days. I think we're doing the exact right thing in terms of programs like NSRP and Maritech Program. Our investment as small as it is, will pay off very handsomely for us in the future. Basically, it's not something that's a subsidy or is a handout. It's just something that's going to help us develop the ideas that we come up with ourselves. It will help us to be able to turn them from ideas on a piece of paper into something new that is developed



as a product that is marketed in the U.S. market and abroad. I think, essentially, that's going to be the key to our future – investment and labor in technology and creativity. I think it is going to be *very* important,

In closing, I would say that the U.S. shipbuilding industry has always had a role in the history of the United States, going all the way back to the colonial days and the trading we did on ships early on in our nation's history. Moving through our nation's history to the Civil War, with the Monitor and the *Merrimack*, and the use of vessels on the inland river systems to transport cargo, as well as the heroic effort during World War II to build cargo ships and war ships for our nation's war effort. Even though we have slipped in the last several years in terms of our preeminent position in the world shipbuilding market, I know we're going to step back into that arena and regain our leadership. To a large extent I think, for the U.S. shipbuilding industry, our best days are ahead of us. I think we are, indeed, perhaps in the most exciting times in terms of preparing for this re-emergence. So, I want to thank you for the opportunity to come by and bend your ear a little bit about what the AWSC is and my general philosophy about how we ought to proceed in the next few years.

## MUTUAL INTEREST BARGAINING

Delivered by Dr. Michael Gaffney, Director, PEWS, New York State School of Industrial and Labor Relations, Cornell University

**S**ome months ago, when I received the call asking if I'd be interested in participating in the **Fourth National Workshop on Human Resource Innovation (I was involved in the third one)**, I was pleased to accept the invitation and I appreciate the opportunity to spend some time with you folks. When asked what I'd like to talk about, I suggested that I talk about what's consuming most of my time these days. Eighty percent of my time is spent on the road working directly with companies and unions around the country and in Canada on subjects related to work redesign. That is everything from Total Quality Management to Re-engineering, Concurrent Engineering, Empowerment Labor Management Cooperation.

These days the biggest demand for my assistance is in the area of Mutual Gains Bargaining or Interest Based Bargaining or Win/Win Bargaining - there are lots of names for it. When SP-5 was just getting started in the early 1980s, we were just coming out of the Quality of Work Life days. If any of you remember, the QWL days were those when human resource innovation was really focused on making workers happy in order to counteract the blue collar blues we experienced in the mid-'70s. That kind of thinking sort came to an abrupt halt when the economy started to impress upon us that "happy workers" wasn't good enough and then we started shifting into this area of Total Quality Control. In all of that stuff however, the notion persisted that labor and management cooperation was always defined as being something different than negotiations, something off line, a parallel structure. It was always arm's length from anything to do with the contract, from anything to do with grievances. It was to be a whole different venue for interaction between union and management.

Dr. Gaffney is on the faculty at Cornell University's Program for Employment and Workplace Systems, a consulting, research and teaching arm of the School of Industrial and Labor Relations. He came to Cornell from the National Academy of Sciences where, as Senior Staff Officer, he worked with maritime management, union and government leaders in plants for work redesign in the U.S. shipping and shipbuilding industries. Since coming to Cornell, Dr. Gaffney has focused his research and teaching on organizational change in shoreside industries where he now spends most of his consulting time. A graduate of the U.S. Merchant Marine Academy, he worked for several years as a licensed officer and pilot aboard deep-sea and Great Lakes commercial vessels before becoming an anthropologist (MA from New School For Social Research and PhD from Ohio State University)

We played around with that during the '80s and as it evolved, we discovered that that wasn't good enough either. Folks are now coming to the realization again, because these are pretty tough times, not just for the maritime industry but in general, that, if this cooperation and collaboration stuff makes any sense at all, then it has to be introduced into the mainstream of interaction between the union and management. That is the negotiation of labor contracts, that is the negotiation of grievances, that is the interaction between union and management day in and day out right on the shop floor or in the yard, resolving issues and contracts or even grievances in some cases that are non-contractual. That is, also, labor and management dealing with more strategic issues. There's a term nowadays called Partnerships; and Bath Iron Works is a good of example where these exist - very elaborate and formal partnership agreements.

Therefore, most of the requests for my time these days are in the direction of helping union and management think about how they can negotiate in a different way. And that's applying across the board, not just in contract bargaining and grievance negotiations. We've seen grievance procedures being radically redesigned or re-engineered, as well as the whole contract bargaining process. Labor/management committees, partnerships, right now are being viewed as negotiations, because they really are. We used to think of them as something other than negotiation but if you define bargaining as the process of resolving issues when the parties are not at the point of initial agreement that applies across the board.

By the way, this same fairly new approach to bargaining doesn't just apply to labor/management stuff. It is where I spend most of my time, but the same techniques and procedures apply to managers negotiating with other managers over scarce resources, people and budgets. They apply to negotiations between managers at different levels of the organization, negotiations between different functions within the organization and also to unions negotiating with other unions and bargaining with suppliers and customers.

They also say this stuff can work in negotiating domestically, bargaining with your spouse or your kids. I have to tell you that I have a 20-year-old son and with him it didn't work. Therefore, I profess no expertise at all in that area. So I thought we'd focus on something I do know something about which is organizational bargaining.

We're going to talk this morning, and for some of you this afternoon about how this stuff works in negotiating issues between and among individuals and interest groups within companies, and within unions, and between unions and companies. Specifically, we'll focus on **labor/management** More specifically, we'll focus on contract bargaining, grievance negotiations

and also this partnership stuff. It's going to be a cram course. Cornell's basic intervention with companies and unions in this arena consists of a two-day intensive training course, sometimes followed by a little phone consultation. Sometimes we'll help them set up ground rules, sometimes we even facilitate a day or two of the negotiation just to get them going. For the most part, however, it's a two-day course. So I'm going to condense two days of training into just a few hours, so strap yourselves in. And don't mistake the fact that I'm going to be moving rather fast to reflect a lack of interest in what you think or your views on this. I am referring, especially to the representatives of the IBEW, which has had a long history, not just in this course but in actual experience. I also include you Bath Iron Works folks, of course, where it has been used in that recent negotiation, and others of you who may have read something about it or heard about it. Accordingly, please interrupt at any point if you have any questions, or you disagree with what I'm saying, or you want to elaborate on what I'm saying based on your own experience, or you want to talk about something different associated with this topic, that is different from what I'm pursuing at that moment.

What I thought we'd do in the time we have available to us is this: I would give you the basic theory and also some of the history behind this style of bargaining. I'll try to sort of combine the two. Then I want to give you a chance to try it out. Lecturing is not a very effective way of teaching anybody anything, but it's especially inappropriate for bargaining training because, when we negotiate, even under the best of circumstances, there's some degree of tension and stress involved. I guess you know that from personal experience. Negotiations is a process of resolving issues when the parties are not at a point of initial agreement. So even if you like the other side, even if the trust levels are fairly high and even if the issue is not that divisive, there is still going to be some stress. When we're under stress, when humans are under stress, we don't reach into our pockets and pull out the latest new-fangled technique we learned at MITAGS. What we do is we go with what's tried and true. In fact, forget the "true" part. We go with what we know, whether it works or not. If our few hours together is going to make an imprint on your personal style of bargaining, and that's my objective, it's not going to happen because I talked at you for three hours. It's going to happen to the extent that you get the chance to kick the tires.

What I'd like to do is first give you a cram course on the theory and history, and then what I'd like to do is do one simulation, a non-workplace simulation, so that you'll all sort of get a gut burning experience, you know, kick the tires, take it for a spin around the block. Then for those of you who are a bit more interested, this afternoon during the breakout session we can work on a

simulated workplace issue, an actual contractual issue that was negotiated in this fashion between a real company and union. I'll let you cut your teeth on that and I'll sort of coach you through it. We'll then see what you come up with. By the way, one of the big improvements we're seeing in contract bargaining is that now it's being approached as project management. Under the old format you just jumped in and started talking. You would end up spending 80 percent of your time on 20 percent of the issues, and nobody ever knew where the parties were on the whole thing. In this style of bargaining, it's really been tightened up quite a bit. I don't think we'll have too much time to talk about that, although, based upon research that I've been doing for the last several years, following upon companies and unions that Cornell has trained and what their experiences have been, we have found in terms of the overall structure of the negotiation that, in many cases, the parties are now negotiating with subcommittees rather than just with the two large committees. That's a big change.

Another one of the key structural changes here is the different approaches of the agents negotiating with their own constituents. A lot of people think that agents can behave differently in negotiating with other agents across the table. Just as critical to the success of this style of bargaining as are those skills, is a different way in which agents negotiate with their own constituents prior to going to the table on their behalf. The research has shown that that is absolutely crucial to the success of this style of bargaining. There are various ways of approaching that and I'll also spend time on talking about that.

Let me start off by pointing out that this approach is not entirely new. I hesitate to call it a new method of bargaining because you're going to recognize, even in the short time we have today, that some of this stuff is not entirely new. You'll recognize some of it because you already do some of it. We have this tendency in human resource innovation that, when the next thing comes down the line, we turn our backs on everything that preceded it. I happen to think that that is a major problem in organizational change. It's certainly not accurate in this case. Other parts of this you'll recognize, not because you do it, because you always intellectually subscribed to it. It always made sense and you recognize that but you didn't actually put that in place. Some parts of it are brand new. Some parts of it, in your wildest dreams, you'd never think to try out in a bargaining - something such as brainstorming. Brainstorming doesn't normally fit into traditional bargaining. It takes a bit of getting used to. Some of it's old; some of it's new.

It goes by a lot of names. At Cornell, we call it Mutual Gains Bargaining. Other folks call it Interest Based Bargaining, Win/Win Bargaining Getting-to-Yes Bargaining, Principle

Bargaining, Problem Solving Negotiations and others. One piece of advice I always recommend is: don't give it a name. Do yourself a favor, don't put a label on it. We'll use terminology today just to contrast it to traditional bargaining as a learning exercise, but it's very, very dangerous to call this anything. For example, for several reasons, most of those titles sound like soft bargaining. This sounds like, "Go easy on the other side. Be nice. Be a nice guy. Cut them some slack." It's not that at all, but it sounds like that. If you go back to your yard or back to the office and you're singing the praises of Mutual Gains Bargaining, you can scare the hell out of your people. They will think that you've gone soft. You know what I mean, you've given away the store. It's not that at all. The terminology is confusing. I also don't like "Win/Win" because, if you go back singing the praises of Win/Win Bargaining, some folks are going to say, "Yea, sign me up for that. Win/Win, that's my kind of bargaining, we always win." And believe me, it doesn't always happen. You don't always win when you negotiate in this fashion. But the title suggests that's the case and then, when it doesn't happen you're a burn; the whole approach to bargaining is questioned.

The most prominent reason I advise for not giving it a name is this: I'm sure your yards have been through many "World-Class Improvement Programs" in recent years, everything from Total Quality Management to Statistical Process Control, Quality Functional Employment Employee Involvement, Empowerment, Labor Management Cooperation Gain Sharing, Re-engineering, Concurrent Engineering, Self Directed Work Teams, and, if you come back with another named improvement program, you piss them off. They haven't digested the last three human resource innovations. So, I like the Nike philosophy, "Just Do It". That is to say that, after you've been to the training, if you've come to the conclusion that this approach to bargaining can help you get more for your constituents (that's the primary reason to do it - because you think it will help you get more for your constituents), then I recommend you just do it. You don't need to run articles in the company newsletter you don't need to run banners up and that sort of thing. I'm not suggesting being secretive about you certainly have to explain what *you're* about to your constituents, but oftentimes, in human resource innovation generally, we hype this stuff up too much and we end up injuring ourselves in the process.

What it is quite simply, given the terminology confusion, is a method of bargaining designed to dramatically-and I use that adverb advisedly – dramatically improve the technical merits of your deals. A system of bargaining designed to significantly improve the technical quality of your solutions, your outcomes and your settlements. By "technical quality," I mean the

extent to which your deals really address the underlying needs and concerns of the parties who sent you to the table to begin with. It doesn't just address the surface veneer issues. It gets right down to the heart and the core of what's bugging them or what their concerns are.

Secondly, this is a method of bargaining designed to improve compliance with those deals. It's one thing for parties at the table to negotiate a solution, it's oftentimes something quite different as to whether or not anybody lives up to it. In fact, that can be problematic even with regard to the agents themselves living up to a deal that they personally put together. Certainly, it's more problematic when we're talking about constituents who are not at the table living up to a deal that was negotiated on their behalf

By the way, there are three roles that you play in negotiations: principal, agent and constituent. When you're bargaining for yourself you're negotiating as a principal. Fully empowered, you can do or say, agree or not agree to anything that you like. It's your call. You don't have to check with anybody. When you buy your house or when you sell your private vehicle, you are bargaining as a principal. In the yard, you seldom negotiate as a principal; you're almost always bargaining as an agent. By definition, then, you are not fully empowered. You have limits; you have parameters. Constraints have been set up for you by the people you represent, and those folks are your constituents. On the management side, your constituents are the managers at your level, subordinates, higher ups, officers of the corporation and, in the final analysis, the shareholders. On the union side, you are agents, as well, and your constituents would be other union officials at your level, subordinates, higher ups, officers of the Local, officers of the International and, in the final analysis, rank and file members. This is a system of bargaining designed to improve the chances that any deals put together by agents will in fact, be lived up to by constituents.

And thirdly, it's a system of bargaining designed to improve the relationship. I mention that third, not because it's of minor significance, actually it's of major significance in the '90s. I think we always like to work in organizations where the relationships are good. It makes it a more pleasant place to put in your 40 hours or 60 hours a week. In the good old days - and we have to go back a ways to the good old days- if the relationships were not so great in the yard, it was no big problem. Really, it wasn't. We preferred that they be good, but, if it wasn't, it was OK. As long as people showed up for work and did their basic job description that was admirable. We stayed in business; we made a buck; we kept our jobs and life went on.

But now there's a new vision in the workplace. A few years ago, if you talked about the vision in the workplace, they would have quietly ushered you out the back gate. Today it's common terminology, and the new vision is Total Quality Management, Statistical Process Control, Re-engineering, Concurrent Engineering, the Learning Organization, etc., etc., etc. In my experience, if you peel all the layers away from any of those world-class improvement programs, what you find at the heart and the core of all of them is a reliance on a high-commitment, high-involvement, continuously improving workforce culture. That's kind of the common denominator to all of those human resource innovations - high-commitment, high-involvement workforce, not just in the bargaining unit ranks, but in the management ranks as well. In other words, in the old days the expectation was that you showed up for work on time and you performed your basic job. Today, the expectation is different. The expectation is you'll show up for work and, in addition to knowing your basic job, you're expected to be able to do some other stuff, other technical tasks, learn new machines, etc., etc. And, in addition to having broadened ourselves horizontally- and again I'm talking about bargaining unit and management - the expectation is we will have broadened ourselves vertically. We are now expected to take on some management responsibilities that were previously handled by managers who are no longer there, things like administrative tasks and some supervisory tasks.

This all comes under the rubric of self-management, self-direction. I don't like those terms myself. Personally, I know of hardly anybody who is self-directed except for a few entrepreneurs that I know of. In my experience, almost all of us still have bosses. The only difference is, now you can't find them because part of being world class is being very skinny in the overhead. We've reduced layers of management. There are fewer managers remaining in each layer, the span of control is larger, and that sort of thing. But the work hasn't gone away, the functions are still there, it's just that those people aren't there, so we end up doing that stuff. So the expectation is that I'm going to come to work with a broader technical base and I'll be somewhat self-managing and, in my spare time, you want me to improve the process. The first two expansions have to do with just servicing the existing process. But nobody's standing still, because continuous improvement is part of the vision. In my spare time you want me to join problem-solving teams and labor management committees and re-engineering squads and the like. Well, the reality is you're asking me not to give you 100 percent now, you want me to give you 130 percent, and that goes for everyone else in the yard. You can't expect people to give you 130 percent and, periodically, we beat the crap out of each other. If the relationships are no good, it doesn't work. And I'm not just



talking about labor/management. I'm talking about relationships between different functions in the yard, between different levels of the organization, etc., etc., etc. In shipboard work redesign, the biggest obstacle to high performance work systems was not labor/management, it was deck/engine. And there are counterparts in shipbuilding as well.

The theme here is high quality technical deals, better compliance with the deals and improved relationships. The objective is that in this style of bargaining, when the negotiation is over, the relationship between the parties will be better than it was when the negotiation began. That's really different from traditional bargaining, where usually the best you could hope for was damage control. You hope that you haven't fatally injured each other, no slight bruising will be accepted.

That's what it is. Here's what it's not. It's not soft bargaining. It doesn't require that you like the other side in order to do it nor does it ask you to trust the other side any more than that trust may be warranted based upon your previous experience with them. Let me repeat that because it's a key thing. A lot of people think this could only work if there is a good trust level between the individuals or the interest groups. In fact, oftentimes I'm introduced at faculty parties and that sort of thing back at Cornell as, "This is Mike Gaffney. He's the guy doing all this work on Mutual Gains Bargaining." And the other person responds, "Oh yeah, I read a book on that" or "I read about that. That's great stuff. You know, that's bargaining for the '90s. I really subscribe to that and I'd love to do it. The problem is the folks I deal with back at my college. Boy, if you knew them, you'd understand why, unfortunately, I can't do this. I'd like to do it. I can't do it. Hopefully, some day trust levels will improve in my facility and I'll be the first one in line to bargain this way." When I hear that kind of argument, I'm chuckling to myself Where do they think trust comes from? It doesn't fall unannounced out of the heavens. Trust is as much the product of bargaining as it is a precursor of bargaining. And my advice to folks is, if, when you find yourself in a bargaining relationship where there is less than wonderful trust, this is precisely how you should negotiate, because this offers you the best chance to build trust and prepare yourself for the next negotiation and the next negotiation and the next negotiation.

In fact, while this style of bargaining has widespread application, it's really designed for environments in which there will be a continuing bargaining relationship. That's why it's commonly used in organizational bargaining although I see it used now with negotiations with suppliers. That is because the expectation is that they're almost part of the group now. It's not an

arm's length relationship anymore. You want them to succeed. You don't want to injure them in the process. Accordingly, it applies in those settings as well.

This is a very robust method of bargaining. You can use it when you're negotiating with somebody who didn't take the course or they didn't get it. They prefer to bargain the old fashioned way. It takes longer. It takes more patience on your part. You have to be more careful as to what you tell them and when you tell them. In fact, I recommend that you use it to some degree so that you can build, first, small "t" trust, and then, over time, capital "T" Trust. Capital "T" Trust is trust based upon how they've been behaving in the interval since the last time I negotiated with them. Small "t" trust is a level of trust based upon how you're behaving in this current negotiation that I'm working with you on. What I'm saying is, if you've got an environment in which small "t" trust is rather low and capital "T" Trust is low, I recommend you actually try this out. That's how you build trust over time.

OK, the history. I'm proud to say the history goes back to my university, back to 1965, when two guys, one of whom, at the time, was on the faculty at my school, Bob McCursey (he's now at MIT), collaborated with another guy with whom I worked with in the past, Dick Walton. Some of you might know him from some work he did with the National Academy of Sciences on crew reduction work. In 1965, these two guys collaborated on a book called *A Behavioral Theory of Labor Negotiations*. My rough guess is that this book has been read around the world by about fourteen or fifteen people. Tops. This was no barn-burner, this is what we call heavy sledding. It's almost impossible to read unless you're getting credit for it. I mean, it's painful. But I give them credit because, in the book, they introduced a concept which proved to be very, very important. They distinguished between what they called distributive bargaining and integrative bargaining. I know that sounds like a lot of jargon, and it is. But it's very important and I'll come back and elaborate on it a little bit.

It caught the attention of some folks at the Harvard Law School, however, and other academicians, who got interested in it because they saw the potential for taking this rather dry academic concept and flushing it out and transforming it into a very practitioner-oriented method of bargaining. It would be something that could be taught to the student lawyers at Harvard Law so that, when they became fill-fledged lawyers upon graduation they might use it to help their clients resolve disputes before getting caught up in the formal legal system. They established a research and development program around this concept, which they call The Harvard Program on Negotiation. It's still in place and it's doing quite well. After only a couple of years they caught

the attention of another college on the Harvard campus, the Kennedy School of Government, and those folks got really interested because they saw the potential for training diplomats to use this same method of bargaining to resolve international disputes before they got out control. And, in fact, in the early years of The Harvard Program on Negotiation that's where all the action was at. It was not labor/management, it was not even organizational bargaining, it was international diplomacy.

To this day, the most famous example, in my opinion, of Mutual Gains or Interest Based Bargaining is in the international arena. I'm sure many of you recall back in 1978, then President Jimmy Carter invited to Camp David, the Presidential retreat outside of Washington, Anwar Sadat of Egypt and Menachem Begin of Israel to come to Camp David to try to negotiate a settlement over a long-standing dispute over the Sinai Peninsula. As you know, the Sinai Peninsula is a big wedge-shaped hunk of sand that sits between Israel and what I would call mainland Egypt, just to the east of Suez. It's been part of Egypt since the pharaohs and is largely uninhabited. Back in '67, the Egyptians launched a sneak attack against Israel across the Sinai Peninsula, first with jets and then following up with tanks. The Israelis were caught surprised but not unprepared and they successfully defended themselves. They pushed the Egyptians back, back, way back, all the way across the Sinai, all the way across Suez, and they camped out. That is, the war was over. It took less than a week the Six-Day War, a decisive victory for Israel. But after it was over, they didn't pack up and go home, they stayed. For over a decade they stayed. This proved to be a real sore spot in the Mid-East which didn't need another sore spot. It was a real affront to Egyptian sovereignty. Basically, the Egyptians said, "Look, it's over; you won, we lost; go home." The Israelis were not inclined to leave and they stayed and they stayed. President Carter who, during his presidency, prided himself on being an international peace maker- he's got a nice little sideline going on now doing the same sort of thing -he invited the two parties to come to Camp David to see if he might help them negotiate the settlement. He also invited to Camp David two guys from The Harvard Program on Negotiation guys by the name of Fisher and Yury. He invited them to facilitate the negotiation. (By the way, that's a new verb in bargaining these days. There is mediation and arbitration and now there's facilitation.) They all accepted. They showed up and negotiated using the same techniques and principles and structures that you're going to have a chance to try out briefly today. They were successful. They came up with a deal, a very famous deal, which we now know as the Camp David Accord. In my opinion, it's a wonderful example of what Interest Based Bargaining can do for you. First of all, they got a high-quality technical deal,

good compliance and they improved their relationship. The technical deal was basically that Israel goes home. That was Egypt's interest, that Israel leave, and they agreed to do that. However, Egypt had to agree not to fortify the Sinai. That was Israel's reason for staying. They didn't want the Sinai to be used again as a base for another sneak attack. That's why they stayed. So Egypt promised they wouldn't do that again, but, you know, "Promises, Promises." They agreed upon an international monitoring force to patrol the Sinai to make sure nobody welches on the deal. Three countries agreed to perform this function - the United States, of course, Canada and Fiji. Go figure! We're still at it. We send National Guardsmen over there to perform that function.

That was the basic technical deal. Compliance has been great. There has not been one violation of the Camp David Accord, and it's been fifteen years now. Even during the Gulf War the deal held. Two years ago it looked a little shaky because Egypt was unhappy with Israel's activities in Lebanon. Egypt threatened to withdraw, but they did not. They just rattled their saber a bit. Accordingly, compliance has been good and the relationship has improved. Well, part of the deal was that Egypt would recognize Israel as a nation state. It was the first Arab country to do that. There's a rash of that going on now, but this is back in '78,'79. In addition to diplomatic recognition, it has led to commercial and cultural exchanges between the two countries. In fact, last summer I was in Holland doing some training for Hercules Corporation and American Chemical Company, and I just had a little bit of the program. They brought all their resin sales force from the Mid-East and Europe together in Holland for a day of, basically, partying, I think, with a little training. That was the excuse. But it brought them all together, and of the two guys sitting right in front of me one was their sales rep from Israel, an Israeli, and right next to him was the Egyptian. They were best of buddies. It really drove home to me how much that relationship had improved in that period of time. So it really was a high-quality technical deal with good compliance and an improved relationship.

Now, some of you got to be looking at me and thinking, 'Yeah, Mike, a lot of good it did Anwar Sadat.' You'll recall what happened to poor Anwar. Not long after the conclusion of the Camp David Accord, he ended up face down in a Cairo parade ground, assassinated by his own troops during a military parade. Therein lies a very important lesson for Mutual Gains Bargainers, folks like yourselves. The State of Maryland Truth in Training legislation requires me to give you the bad news. I've been singing the praises of Mutual Gains Bargaining for about 20 minutes. However, I'm now going to back off a little bit and talk about a significant risk associated with this style of bargaining. That's the bad news. The good news: there's a cure or remedy. But that's

really not the right term, because it is not something you do after the fact, as in the case of a cure or remedy. It's something you need to do different and better before you start bargaining with the other side that would improve the chances that your constituents will not shoot you, their agent.

It all has to do with this notion of "position," which is a technical term in this style of bargaining, but it's one that you're probably very familiar with. What I mean by a party's position is their initial preferred solution to the problem, usually exaggerated and delivered with some conviction and some enthusiasm. The point I'm making is that it's rare in bargaining that the parties come to the table- and I'm using that just as a metaphor to include even the informal negotiations - it's rare that we would actually start negotiating with a blank sheet of paper, an empty mind, a clean slate. Almost always we'd begin with positions. Before you came to see me you took some quiet time to think through to yourself what do you want to get out of this, and I've done the same, and we established our positions. That's if we're principals. If you're agents, you probably communicated with your constituents to find out what they want you to achieve or you've harkened back to earlier conversations to anticipate what they would like you to get. But anyway, when we start off each of us usually has an initial preferred solution, oftentimes exaggerated and usually delivered with some conviction. What do I mean by exaggerated? Let's say that I've thought about this to myself and I've decided, when it's all over, when the dust is settled and the smoke is cleared, I want to be at point D. Is that what I ask for going in? If that's where I want to be when it's over, will that be what I ask for? In actuality, I'll inflate my position. On the other side, if you've decided that there is a point at which you can be comfortable with when it's all over, is that what you're going to offer me going in? Even though the parties may actually be fairly close, oftentimes we'll start off at some considerable distance, inflating and deflating our positions. And why do we do that? It's called bargaining. It's because we define bargaining as essentially horse trading. If I can get inside your heads, most of you, most of us, think of negotiation as essentially swapping. The reason why we inflate or exaggerate is because we really think that the only way you get what you need is if you're willing to give something else up. You don't get something for nothing. You'd be crazy to go in and ask for exactly what you need, because now, if you've got to move, you're going to end up with less than what you need to. So we add a layer of fact, a buffer zone, expecting that we're actually going to be making some adjustments. And that's on any single issue. In contract negotiations which are multiple-issue negotiations, you're not bargaining over only one thing, you're bargaining over maybe 20, maybe even 60 things. If the union has five issues that are really important to the union in that negotiation, how many will they

probably put on the table? You can count on it being more than five. I'm not just picking on unions. Management does the same thing. The reason is exactly the same. If you expect to get the five that you really need, you're going to have to give away some other stuff so you put in extra stuff in the agenda to trade away in the latter stages of bargaining.

I have a strange hobby; I collect regional bargaining terminology. There are terms I've heard around the country which people used to describe, not the five things they really want, but the extra things they don't really want but throw into trade away for the things they really do want. Here's the list: dummies, decoys, red herrings, preview of coming attractions, shake and bake, cannon fodder, phonies, give-aways, trade-aways, dog bones, smoke, fog, bullshit, cushion, grocery list, fluff, etc.

In reality, however, oftentimes we go into contract negotiations expecting two acts of compression. On any single issue we'll start off compressing it vertically for an agenda, expecting that we're then going to compress the issue horizontally. Now, you might think that you know where I'm going with this: that I'm going to tell you that you can't do it anymore, that in this style of bargaining no exaggeration is allowed. Well, I'm not going to tell you that. First of all, my wife is a nurse and the motto of her profession is: first, do no harm. I subscribe to that too. I would never recommend to anybody not to exaggerate ever in bargaining. If you go into a negotiation and you ask for exactly what you want and need, and the other side exaggerates and you're unable to invent a win/win solution to that particular problem, it means that, basically, you are left with your position. The result is: you're screwed. Actually, in the non-traditional style of bargaining, the exaggeration takes care of itself, and I think we'll have time to see that.

What we're finding in the research is that the phonies, the trade-swaps and give-swaps are largely gone. It's not because they're swearing an oath, it's because it's just so hard to pull off. In this new style of bargaining, it's hard to fool the other side as to which are the real issues and the phony issues. In traditional bargaining, it's easy to fool them because when you tell them the dummy issue they start attacking, you defend it, they attack it. But in this style of bargaining, when you tell them the phony, dummy or the trade-away issue, they don't attack it, they start asking YOU questions. Well, why do you that? How would you use it? where would you use it? When would you use it? Because you don't have any good answers, you'll have to admit that it was just a trade-away. So you can forget about the exaggeration part because it takes care of itself.

Anwar's problem had to do with the fact that the parties had positions to begin with. If we were bargaining right now, *you* and I, and I started off by laying my position on you by telling you what my initial preferred solution is – and it's probably somewhat exaggerated and I've delivered it with some force and conviction – you're going to react by attacking my position. Then I'll defend it. We'll continue like that until you tell me your position. Then I'll attack it and you'll defend and I'll attack. For a change of pace every now and then, we'll attack each other personally, just to break up the monotony.

I want to suggest to you that the traditional style of bargaining essentially takes place in two phases. Phase One begins with the parties taking positions. I'll put forth my initial preferred solution, which will be somewhat inflated. Then you put forth your initial preferred solution, which probably may be also somewhat inflated. By the way, some people think that the non-traditional style of bargaining means no positions; that interest based bargaining should be positionless. My experience has been the opposite. Positions can be a wonderful assist in getting this style of bargaining started. I've known companies and unions to take this training, and then they thought about it for a while and decided they wanted to do it, and then got together and the union said to the company, "Hey, we think this is worth a shot. We'd like to try it." And management said, "Yeah, absolutely. This is the way to go. We feel the same way. We're ready to do it. We want to proceed." And the union says, "Absolutely. We're ready. OK, let's go. Do it." "No positions, right?" "Yeah, no positions." "OK." The result of that false start is nobody knows what to say or how to get started. In the alternative, they'll talk about interests, and the interests are so global. You know what they are management wants competitiveness and productivity; the union wants equity and fair treatment. It doesn't really get you anywhere.

In traditional bargaining, we start off with positions and then, for some considerable period of time, all we do is attack and defend, attack, defend, attack, defend, attack, defend. This phase of bargaining is called the Hang Tough Phase. The objective here is to impress upon the other side how firmly rooted we are in our conviction that it's got to be our way and we can accept no substitutes. We're really kind of softening them up for Phase Two. Phase Two kicks in when the parties start to feel the heat on an approaching deadline. That deadline can be a political or technical or legal deadline (as in the expiration of a labor agreement). What happens is that the agents start to feel pressure from their constituents to get the deal done. One or the other of us will make what I call a credible offer. In this phase of bargaining is called the Credible Offer Phase. A credible offer occurs when one of us makes a modification or adjustment to either my

position or your position. When that occurs something called “anchoring” takes place, where all of our energies in focus now will hone in on that single credible offer, and the only thing we’ll talk about from that point to the conclusion of the negotiation is nudging it up, nudging it down, accepting it or rejecting it. Oftentimes you will come up with a deal in the process. The good news is that the deal is recognizable and understandable to the parties involved, including your constituents, because it’s usually the deal is a modification of the credible offer, which in turn is a modification of positions. So everybody can understand what it is and where it came from. The bad news in traditional bargaining is, because of this “anchoring” phenomenon we become prematurely blinded to a universe of alternative deals which might have been actually much better than that first credible offer. Unfortunately, however, we’ll never talk about them, we’ll never think about them or discuss them, because we’ve anchored on that credible offer. The parties have become prematurely blinded to a universe of supplementary deals, additional things I might have been willing to do or you might have been willing to do that would have made the primary deal sing, but we’ll never consider them, we’ll never talk about them, because we’ve anchored on that first credible offer. The end product is, oftentimes, you end up with a deal which is not technically as good as it could have been and it tends to be rather one dimensional, simplistic, overly simplistic, not a good match for the complexity of the organizational issue that you’re bargaining with. That is the weakness of traditional negotiation.

Unlike the traditional bargaining process with its two phases, in the new style it’s kind of like a continuous funneling affair. The difference is, in this style of bargaining, is that when you exchange your positions, rather than get into an attack/defend mode, you spend your initial time focusing on interests. Now, interests is a technical term that you may be less familiar with, so let me define it for you. Interests are defined as the party’s underlying needs, concerns, fears, hopes, aspirations, all the various reasons why you took this position to begin with. These positions don’t just fall out of the air. They’re based on something and they’re based on the interests of your constituents. The key words here are underlying, needs, wants, concerns, fears, etc.

Let *me* describe the relationship between positions and interests. First of all positions. You never have to wonder what the other guy’s position is. The expression “in your face” typifies the situation. We’re in each other’s face with our positions. Usually it’s the first thing we communicate. Sometimes we do it in writing. A proposal is a synonym for position. When they negotiate labor contracts in the corridor from Boston down through Philadelphia, when they start off by exchanging their list, they don’t exchange a list of positions or a list of proposals, they



exchange a list of demands, lest anybody have any doubts what they're talking about. And by the way, there are regional difference in this language. In the panhandle of Florida, that is Tallahassee, Pensacola, and others down there, when they negotiate labor contracts, they start off by exchanging these lists, as well, but they don't call them positions, proposals, or demands, they call them "askins." I'm serious. A.S.K.I.N.S. They exchange their list of "askins." When I first saw this, I thought, "My God, they're polite." Then I hung around. They beat the shit out of each other. No matter what you call them, positions are very much "in your face," a written proposal or a verbal proposal. They are very explicit.

But for every position that we take in a negotiation there are multiple underlying reasons why we're taking that position and that's what we mean by. I'm not suggesting that there are always a fixed number of interests supporting every position There could be from five to 50 different reasons why you're taking that position. In some cases there might only be one. In some cases, a position can be ereducible to an interest, but it's rare. Usually, there are multiple reasons why we're taking a particular position. The other thing I want to convey is that as explicit as positions are, interests tend to be implicit. They tend to be submerged, hidden, and in some cases, they're hidden on pupose. In some cases, we consciously hold back our interests from the other side, or at least some of our interests, because we're afraid that, if they understood our need, our concern, our fear in this regard, they'd use it to win at our expense. In some cases interests are not revealed on purpose. For the most part, however, interests remain submerged, not out of some conscious strategy or philosophy or tactic or gamut or ploy, but interests generally remain hidden (and this is going to sound incredible but I'm convinced it's true), simply because we never thought to tell them and they never thought to ask. And you might say, "Mike, that's incredible. Why in the world, in a negotiation, would the paroles not be volunteering this information? Why would they not be inquiring after it?" I think the answer is that the traditional process and structure of negotiation discourages us from sharing interests. We don't do it in Phase One because we're too busy attacking and defending. And it's not just a question of being too busy either. We never would ask the other side, "Why do you want that, how would you use it?" Like, I care? I mean, in Phase One we're trying to send signals that we really don't give a damn about what they think or what their problem is. It is our concerns that are what's going to rule this negotiation.

So it doesn't happen in Phase One. Nor does it happen in Phase Two, because now we're too busy anchoring over the first credible offer. What I'm saying is, if interests are revealed or addressed in traditional bargaining, it's fairly accidental and incidental to the main event. That

style of bargaining does not really encourage the parties to do that. Whereas Interest Bargaining is designed specifically to get those interests up to the surface where they can be understood and then possibly addressed in the context of a solution. How do you suppose you find out what their interests are when they've just told you their position? You ask questions. You ask a lot more questions in this style of bargaining. Let me give you a mental image, though, an analogy, a metaphor, as to how this works. In bargaining, when we exchange positions, it's much like exchanging onions. If we were bargaining right now and I laid my position on you, my initial preferred solution, it's like I've handed you an onion. You take it and look at the outer skin or shell of the onion and you start attacking and I defend it and you attack it and off we go. In this latter style of bargaining, when I give you my position, again I'm handing you the same onion, but this time when you take it you don't attack it. You look at the outer skin or shell of the onion, which is my position, and you ask me, 'What's broke that this is going to fix? Why do you want that? How would you use it? Where would you use it?' In effect you're peeling back the first layer of that onion. And when I respond with an answer, when I tell you, 'Well, we got to have that because . . . "in effect, I'm revealing that first inner layer of the onion. Then you'll probably ask me why again. You're not badgering the witness, you're not being redundant, you're just asking for a deeper level of understanding. 'Why do I feel like I need that second thing that I told you?' And then I'll answer that question, in which case you've peeled back the second layer to reveal and now I've revealed the third layer. It's important to stress at this point that, in fact, there's a very strong linkage and connection between interests in a negotiation. They're sort of hierarchical, in much the same way as the layers of an onion. This stage of the negotiation, which can take some period of time, amounts, basically, to peeling back the layers of each other's onion, asking why, and the how, and the where, and when, without the attacking part. At this stage you're just trying to understand what they're about.

Let me now describe for you a procedure or sequence of steps or activities that I recommend you follow each and every time you negotiate in this fashion. Let me just run through it briefly with you, explaining in sort of a quick skim, how this works. You start off by identifying what the issue is. This could be a grievance, it could be a gripe, a strategic issue with a labor/management committee, a partnership committee, it could be one of 60 issues in a contract negotiation, and we won't use any particular issue, in this particular case it's whatever the issue is. The next step is opening remarks, and hold off on that, we'll come back to that later. Then you get to positions. In this case we'll use a laborh/management example. This issue could be one that's

brought to the table by one or the other party, or in some cases they both raise the issue. Let's presume it's a work rule issue brought to the table by management. It's their issue and they probably have an initial preferred solution. They have a proposal which explains what they want to do. That is, they want to change the contract, amend the contract, add a section to the contract or whatever. This is their initial preferred solution. Now, the union may have no position at all, they're all ears, they don't know anything about it, they're listening. Or they could have a position which is "Hell no!" or "Not in your lifetime!" or something along those lines. Or the position might not be no, it's just something different than management's initial preferred solution. The point I'm making is, when you negotiate in this fashion, both parties might start off with positions, or one might have a position and the other may not, and, at the graduate-level Interest Based Bargaining, you could start off with no positions. But that's fairly high-level stuff. Now, in traditional bargaining you'd start attacking and defending right away. In this style of bargaining, you're first going to focus on interests. In this case, using a management/labor example, whoever brings the issue to the table will probably start off with a speech (hopefully it will be a short speech), in which they'll probably give some reasons why they think this is the best thing since sliced bread. They're revealing some of their interests, usually only about one or two layers deep, oftentimes, because that's all they know. They don't even understand that there are deeper issues behind that. This is the point where the union will start asking questions: "Why do you need that? How would you use it?" Management then gives further explanations. That's what I mean when I say that there are interests underneath interests in a hierarchical sense, like layers of an onion.

In some cases, in formal negotiations, you actually write these interests down on a master visual aid. In other cases, 20 or 30 times a day you're bargaining, you don't even know it you just keep track of them mentally. At some point the union's going to give their speech or management's going to ask "Why are you resisting? Why do you say no?" Then the union starts revealing their interests and, on further discussions, you find out there are interests underneath interests, etc., etc.

And this interest discussion could take some period of time. I wish I could tell you that Interest Based Bargaining is quick, but, actually, our research shows that in contract negotiations, calendar-wise, it takes about the same amount of time the first time out of the blocks. If it normally takes you two months to negotiate a labor agreement and then you try to do it this way, anticipate two months. Although probably you'll spend more time face-to-face. There's a bigger investment of personnel spending time working the problem than you would find in traditional

bargaining. It's time better spent, it's a good investment. But it's not quick bargaining. In grievance applications, we're finding that the calendar time is actually abbreviated because, instead of the grievance getting kicked from step, to step, to step, to step, it tends to get resolved at earlier steps. This shortens the calendar period, although there still is that investment of time the steward and the supervisor need to take. It's not just denied. You have to spend time peeling the layers off the onion and doing this other stuff.

Options is the next phase – and we are going to come back to poor Anwar in just a moment. You end up with a list of options and then a shorter list of options and then, eventually, in this style of bargaining, you will get to offers and counteroffers and eventually, hopefully, to a deal. In the traditional style of bargaining, you go from positions to offers, counteroffers and a deal. In the new style of bargaining, it's positions, interests and then options, a smaller list of options, offers, counteroffers and a deal. What do you suppose is the difference between an offer and an option? They are different terms, different concept. How do they differ? Offers anchor you because you've made a commitment. You've obligated yourself or your constituents. I say, "We will do this if you will do that." So I'm committing myself or my organization or my constituents when I make an offer. With options, there's no commitment at all. It's wild-ass crazy ideas or maybe not so crazy ideas, but without any commitment or obligation. Offers also come one at a time and there's that tendency then to anchor, whereas options tend to come in a bunch and, again, without commitment.

The way it works here is, after you've gone through this exercise, the parties also usually paraphrase what has taken place just to make sure they understand. Paraphrasing is a test of understanding, not a test of agreement or liking. If you can listen to the other side tell you their interests but you're selectively listening or you're getting it twisted and you may not have it right we recommend that paraphrasing be done. It works quite well if you just go through the exercise before you move onto options. Management looks at the union's list and just puts in their own words. The effort is to see how they think the union's head is working on this. It's not an intended to be editorial comment but, simply, to let me see if I understand what you guys are saying. Oftentimes an additional benefit of that paraphrasing is that you'll get some mistakes corrected. Further to that, however, the union might say, "Oh yeah, I forgot to mention this, this and this." Additional interests will come out of the process, and maybe the union returns the favor. Then, what both parties do is look at each other's interests and try to come up with ideas, solutions, elements of a solution. You're not looking for the silver bullet, the holy grail, the golden fleece, *the*

solution that's going to solve everything in one fell swoop, you're looking for bits and scraps. You're looking for something that might help the union with this concern here without injuring management, or injuring management minimally, or in the best of all possible worlds, assisting management, with their stuff. You try to come up with something. You don't critique the ideas. You just brainstorm them. The goal is to get ideas out. You'll also be trying to come up with an idea that might help management with one of its concerns, again without damaging the union or damaging them minimally etc., etc. Eventually, you end up with a whole list of ideas, options and semi-ideas. Again, there is no commitment or obligation at all.

And, by the way, there's just one list. It's not like you have management options and union options. You have one list because their problem is your problem. I say that with some hesitation or trepidation, because that really sounds like a goody-goody-two-shoes principle. "Their problem is my problem." The fact of the matter is that it is central to this style of bargaining. It's not because you feel sorry for them, it's not because you like them, it's not because you sympathize. It's out of enlightened self-interest. You're trying to understand and address their problem here to improve the chances that your stuff gets fixed. In traditional bargaining, the basic operating theory is that my committee is going to come to the table fully staffed, skilled and intent on solving my side's problem. We expect your committee to come to the table fully staffed, skilled and intent on solving your guys' problem. And betwixt the two of us we'll lick the platter clean. That's traditional bargaining. We'll worry about our stuff, you guys worry about your stuff and that's how we'll optimize.

In this style of negotiation both sides are trying to understand each other's stuff, not out of academic curiosity, but out of enlightened self-interest, because in the Options Phase managers are going to try to come up with ideas that will help the union, or at least not injure them, at the same time helping themselves. By the way, don't get me wrong. In this style of bargaining your job as an agent is essentially the same as it was before. It is to protect and to enhance the interests of your constituents. That's still your job. The difference is that now you're trying to do that in a fashion that does not injure the other side and, hopefully, might even assist the other side. As a result, you end up with this list of options with no commitment at all. Some of them may be crazy ideas, some of them may have some value.

The next step is to shrink that list of options to a smaller list. We think we've made a big improvement in this regard. By the way, this process looks a lot like problem solving. In problem solving, after you've brainstormed the list, generally, you talk about the pros and cons of each of

the options. It takes forever, it's tedious, it's not a very efficient way to go. We recommend that, when you get to this stage, you caucus. The two sides caucus. In the management caucus they are asked to check off those options that they think they'd like to talk about some more. In the union caucus they're being asked to do the same thing, check off the options that they think might be interesting to discuss further. These are not deals or offers – you're just coming up with a short list. From that short list you'll come back from the caucus. It should be a very brief caucus, because you're only making a short list. The point here is to see if there are any check marks or double check marks. Are any of these options doublechecked? If so, it might possibly be the beginning of some element of Win/win solution. This is like a quick intuitive cut that quickly gets you to where you're going.

Now, if you come back and there are no doublechecked matters (and that can sometimes happen), then one side would say to the other, "Hey, how come you guys didn't check any of these? We thought they were going to be good for you, too." And the other side tells the first why they weren't crazy about them. In the process of doing so they may be reinforcing earlier stated interests and then possibly reveal some new interests and write them down. In this exchange the parties may reveal new interests or reinforce interests. If your understanding of each other's interests has been sufficiently broadened, you might brainstorm a second time and come up with some additional ideas. Then caucus a second time, very briefly, and check off the ones that you would be interested in talking about, come back and see if there's any overlap the second time. If there is, that's where you start talking. If there's not you could go through the process again.

Let me quickly jump ahead and entertain the thought that sometimes when you do this, every time you come back from the caucus, there's never an overlap. That is, the stuff that management thinks is interesting to talk about the union doesn't think so, and vice-versa. You might wonder, what's the problem here, what's this mean? I'll come back to that in just a moment.

A lot times what happens in this style of bargaining is that when you get to the end as a result of a number of doublechecked items, you end up saying, "OK, well, we both like this idea; we agree with part of this idea but not the whole idea; we both like this one, and we have to invent a little thing here to supplement it," and you end up, eventually, making offers and counteroffers. You end up knitting together the fabric of the deal out of the bits and scraps that come from the brainstorming session and the caucus. And you have a deal.

Now the good news here is that when you negotiate in the Interest Bargaining fashion, the deal you arrive at is probably going to much better technically than this deal resulting from

traditional bargaining. Why? Because it was not just a reaction to the first credible offer to hit the table. The non-traditional deal is based upon a thorough evaluation of a number of options which, in turn, are based upon a deep, rich understanding of each other's interests. You're likely to come up now not only with a better deal but one that's multi-dimensional. It's a better match to the complexity of the organizational issue you bargain with.

So that's great news, but it brings with it a significant problem. Let me explain: Usually you didn't have this in your pocket when you sat down, when you began bargaining you were waiting for the right time to throw it out on the table. This kind of deal is, generally, an invention of the table. It is a creation of this process. When you sat down you couldn't have guessed what the result was going to be because you hadn't talked, you hadn't focused, you hadn't peeled the layers off the onions yet. You didn't know what each other's interests were, you hadn't generated options, etc., etc., etc. You end up with a really wonderful, elegant, technical solution but it's like brand new. Nevertheless, you're proud of yourself and you leave the table, your chest is all puffed up, and you go back to your people, your constituents, and they shoot you. Now we're back to Anwar. Why do you suppose your constituents are so unhappy, so pissed off with you and the deal you just made? What's the problem here? Part of it could be lack of participation because they don't know where the hell this deal comes from. They don't understand it and they don't appreciate that. All they know is it sure as hell isn't what they sent you out to get and, if they didn't send you out to get it, they've got to presume it was the other side's idea. In that case, you're a weak agent, or worse, disloyal. And they've got to guess that this is somehow going to injure them. Inasmuch as they didn't tell you to get it, it's the other guy's idea, and, as such, it's probably going to screw me in the process. Not only are your constituents unhappy with this, you're no longer their agent. Therein lies the problem.

Now I said there was a remedy and a cure, and here's what it is. Again, not a cure in the sense of something you're doing after the fact. If you just gather the positions of your constituents the way you normally do in traditional bargaining, using survey instruments and various methods, and you ask our constituents what they want you to get in this negotiation (and even if you don't ask), they'll tell you, "Get me this, this and this." As agents, we sometimes see our job as messengers. We collect up these positions and then we go to the table with the other side. If you do that in this style of bargaining and then start focusing on interests, and then generating options, and doing this, you're dead meat. What you have to do when you are first talking with your constituents, before you even go to the table on their behalf and when they hand you their positions,

or when you ask for their positions, you have to also engage your constituents in a dialogue, so that they understand what their own interests are behind those positions. It's still OK to collect positions, as long as you also have a discussion – a negotiation-with your constituents so that not only you, but they, understand all of the interests underneath their positions. That way, when you come back to them later with a deal, they won't compare it solely to the position, in which case you're at fault. They will be comparing this to the interests that they talked to you about, in which case they can understand it, they can appreciate it and they can appreciate your contribution on their behalf. That is the secret, if there is a secret. That is the key to success in Interest Based Bargaining. It's the extent to which agents do a better job of negotiating with their own constituents before they even go to the table with the other side.

By the way, having said this, let me point out it's hard to do. It's critical, but hard to do, both for union agents and management agents. It's hard, however, for different reasons. It's hard for the union agents to do this for logistical reasons. It's hard for the union guys to find the time and the opportunity to have this dialogue with their constituents, to peel the layers off the onion. And when I mention this to managers they say, 'Well, hell, that's what the union meeting's for. This is what they should be doing in their union meetings.' I don't know about you guys, but attendance at union meetings ain't so great these days, and when I mention that to managers they go, "Just proves that they're apathetic towards the union. They really don't care about the union." And there's some degree of truth to that. In my experience, however, the bigger problem with attendance at union meetings these days is that both the member and his or her spouse are working now. There's no time in the day for an additional meeting. In fact, I think America is about meetinged to death. It is not just after hours but during the business day. But anyway, that's the union's problem logistics.

Now here's a radical thought. Some companies are now providing their union bargaining committees or the union executive board with company time and company space to meet with their constituents to prepare for bargaining. You can hear the traditionalists now, 'Why would I want to do that? That's like aid and succor to the enemy. Why would I want to help them gird their loins to do battle with me?' The answer is, of course, those managers have come to the conclusion that, if they don't offer this assistance, the union, lacking a good logistics system, will probably fall back on just bringing a list of positions to the table or and/or that list will be reflecting only the desires of a small group of the membership that came to the meeting. The company would rather be negotiating with agents who are well connected to the membership rather than poorly connected.



In fact, not far from where I live in upstate New York, Xerox has now redesigned its whole manufacturing system around business area work groups, called BAWGs (it's a terrible acronym). They are kind of like self-directing work teams, with about 20 or 30 people in a BAWG. For one hour a month they stop operations and have a meeting with those 20 or 30 people. And a manager will come in from somewhere in the organization and spend about half an hour talking to the workers about schedule changes, you know, what's new. He then leaves and during the last half hour, the steward holds a union meeting right on the shop floor with a small group of members rather than with the total group. In those cases where I mention that the company is providing time and space for the union leadership to talk to the whole membership, my observation is that it doesn't work very well. Once the meeting gets that big there's no real dialogue. It degenerates into just kind of speechifying.

If you think this style of bargaining is something you do in the few months just prior to the contract negotiation you need to retool. This is something you need to be doing from one contract to the next. In fact, this sort of leads you in the direction of what some people call "continuous bargaining." When I mention that approach to battle-scarred veterans they cringe. Their reaction is that continuous bargaining would be cruel and unusual punishment. Obviously, it's a different style of bargaining. At those outfits that are doing this I find a real paradox. The rate of change within industrial organizations is still ramping up considerably. It has been throughout the ages. Yet we're now finding contracts of five years, eight years, nine years, eleven years, even fifteen years' duration being signed. You would think that, if the rate of change was increasing, the term of the contract would be shorter, so that you could change or modify as things change. But the opposite is happening. The only way that can succeed during a period of rapid change is to have de facto continuous bargaining, where union and management get together on a fairly regular basis to make adjustments as they go. That only makes sense, because you're just not going to get it right the first time. It is impossible not have to mess with it for five or six years, not in the '90s. Anyway, that's the union's problem.

Management agents have a problem too. And it's not logistic, because their constituents are not the masses. The union constituents are the masses, oftentimes in a "Give us Barrabas" kind of mood. Management's constituents are in a nice hierarchy. The management agent knows which constituent he has to talk to on this matter and they can schedule a meeting in your office or my office, and we do it on company time. Logistically, it's much easier to have this dialogue or, at least, they've got an edge over the union in terms of who they think might be the person to talk to.

Their bigger problem, in my experience, is their constituents are usually higher up in the food chain than they are. Sometimes negotiating with your own constituents is like telling the emperor he has no clothes. The worst thing that can happen to a union guy if he pisses off his constituents is, he's back on his tools. The manager's comparable fate is, he's fired. The fact of the matter is, however, that that is what is required. If you think being an agent is just being a messenger, this is not your style of bargaining. This style of bargaining requires leadership. You have to be willing to tell the emperor that he has no clothes, and, in many cases, he doesn't.

I think last time I was here I talked to you about The Airport Bookstore Theory of Large-Scale Organizational Change. Well, I have this notion that many of these world class programs have their origins in airport bookstores. Some senior executive on his or her way to an important meeting experiences a delay in the flight's departure time. With nothing else to do, they go into the airport bookstore and, naturally, gravitate into the management section. They pull off the shelf the latest volume of How You Can Revolutionize Your Yard in Forty-Eight Hours. They read this damned thing and get all psyched up. After all, they're vulnerable; they missed their plane. They come back to the yard and they call in their direct reports and say, "Get me this. This is the answer, this is the greatest thing." Under the old school, as their agent you'd say, "Yes, boss," and off you'd go to get it from whoever, from the union or from some other part of management. Sometimes you'd get it and then you wouldn't know what to do with it.

In fact, I've been in contract negotiations recently where management will come to the table and they'll say "We've got to have flexibility. We've got to have it, that's one of our strike issues." And the union says, "Flexibility? You didn't use the flexibility we gave you three years ago." And then I'd go into the management caucus and I'd say, "Is that true?" And they go, "Yeah."

In other cases, I'll be at the table and management will say, "We got to have this world-class thing." And the union (because they've been trained in Interest Based Bargaining) will say, "Well, exactly how would you use that if we gave it to you? When would you use it? Where would you use it? How would you use it?" Management's response is, "We'll have to get back to you on that. We don't have all the i's dotted and the t's crossed yet. We'll get back to you." Then I go into the union caucus and the guys are going, "Bullshit! They know exactly what they're gonna do with that, but they won't tell us because it's going to injure us." I then go in the management caucus and they have no idea what they'd do with it and, if the union knew that, they'd be even more panicked.

This behavior, by the way, is reflective of a significant difference between the management and union tribes. Management oftentimes, will move in mysterious ways. Management will make proposals and start down a road without knowing exactly where it's going to take them. They don't have the t's crossed and the i's dotted and they're fairly comfortable with ambiguity. Unions are not. Unions want specificity; they want details. They want to know exactly what you are going to do with it and when you are going to do it, etc. In some cases the union suspects that management is doing this to screw them over but, actually, it is partially because it is management's job to work in mysterious ways. That's why we have a management. Their job is to be looking five or six or eight or ten years down the road. They therefore have to start in directions without having all the details worked out in advance. On the other hand the unions have to deal with today, or tomorrow at the very latest.

The other problem has to do with power differentials, which has varied between the two parties historically over time. Let me ask, rhetorically, in general, in 1995, in industrial relations in this country, who has more power vis-a-vis one another in the labor/management arena, companies or unions? Most people would say companies. That is, by the way, a reflection of the fact that customers have more power, which puts management in the catbird seat vis-a-vis the unions. Another reason, therefore, why management is comfortable with ambiguity these days is because they generally have more power than the unions. They can sort of anticipate that, down the road when eventually you get to crossing the t's and dotting the i's, they'll do it in a fashion that doesn't injure management. They've sort of got the upper hand. If you're in the union these days, that make you real nervous because the devil's in the details. The point is that, historically, the unions have been in the second seat and that can make them real nervous.

I don't know what unions can do to help management agents with this problem. There's no substitute for leadership here. I just hope that all of you management agents have demonstrated many, many times in the past to your bosses how much value you have added to the organization. When the boss says, "Get me this," you should be in a position to say, 'Well, why do we want that? How would we use it? Where would we use it?' That is, in fact, what's required in the '90s, on both sides.

There is one other thing that I've seen in recent years that I want to touch on. There's a tendency on the part of management agents, when they do prepare for bargaining, to sound out only the interests of those constituents higher up than they are, because managers tend to live in this hierarchy. Accordingly, because they're only looking up, they fail to find out the interests of

subordinate managers. They get the agenda for the negotiation from on-high. Then they'll go to the table and, in some cases, they'll win something from the union for whatever reason, and when they try to implement it in the yard, it doesn't work. They then place the blame on first-level management or supervisory resistance. In some cases they are resisting for political reasons – they're pissed off that nobody asked them. In many cases, however, they're resisting because it was a dumb idea. If the management agents had spent a little bit of time talking with subordinate constituents, they would have known that. In the alternative, they would have modified their proposal going in, so as to come up with something that actually worked better.

Now I'd like to move from the theory of Mutual Interest Bargaining to some comments on specific aspects of real life bargaining. One of the dangers in bargaining is, when you lock into your positions, it sort of prevents you from coming to grips with what your real interests are-if you ever understood what your interests are. In preparing for bargaining we should attempt to understand what the other party wants. Oftentimes we think we know what's in the other guy's head because it is the same old crap. They always want the same old thing. If you think you know your own interests and their interests, you're not going to peel the onion much. My experience has been that nobody will peel the layers off your onion better than the other side. You'll never ask yourself the same quality probing questions in preparation for bargaining in terms of your own interests than the other side will ask in the midst of actual bargaining. So, in this style of bargaining, a lot of value occurs at the table. A lot of learning occurs at the table, through the dialogue back and forth between the two parties.

Another thing that gets in the way of some people is the fact that there's bad history. The trust levels are low and there is a lot of personality conflict. If you let that stuff get in the way, you're not likely to share many interests with the other side. You're not likely to tell them much about your interests, because they've screwed you at every opportunity in the past. Those who are successful in this kind of negotiation are those who are able to separate people from problem. I know that that is very easy for me to preach but hard for you to do in real life bargaining. But you've got to do it. You've got to be able to put that aside. You can go so far as to say to the other side, "Look, I don't like you. I don't trust you and I probably never will. But I'm going to put that aside because we've got a big problem here and we need to work on the problem." There's only two things I can think to advise you that will help you actually implement that goal of separating people from the problem. One is recognizing the significance of what you're bargaining over. In organizational bargaining, we oftentimes forget the importance of what we're negotiating

over – safety, health, the financial health of the company, your jobs, livelihoods, standard of living for your families. We have a tendency to forget that it's really important stuff. The other thing that can help you operationalize this is recognizing it's not the same thing as forgiving and forgetting. This method of bargaining does not ask you to forgive and forget. It asks you to separate people from the problem. Even if you are able to put it aside so that you can focus on the interests, it doesn't mean that you have to bend over backwards in the other guy's direction. The point is, even though the trust level is really low and the parties eventually do discuss their interests in order to be able to share enough information to make an accommodation, it doesn't mean that the distrust disappears. Good fences makes good neighbors. This style of bargaining does not ask you to trust the other side anymore than that trust may be warranted. When you're negotiating with somebody where the trust, capital "T," is quite low, I'm saying bargain this way, but you can build safeguards into the contract. This is not "bet the ranch" bargaining. It's called "Getting to Yes; not "Getting to Dumb."

Another thing in this style of bargaining is the matter of truthfulness. If you and I were bargaining right now and I asked you a question, does that mean you'd always give me a full, complete, honest answer to every question I put to you? Of course not. Some people think that this style of bargaining means full disclosure, everybody tells everybody everything. I think that's crazy. Some people think that this style of bargaining requires full disclosure. That simply is not the case. Certainly, in this style of bargaining, you have to reveal more information than you normally would. By the same token, however, you have to use your own computer. You'd like to tell them everything because you would hope that they would use that information to create value for both sides, that is, make the pie larger. By the same token, however, it is possible that they would use that information to win at your expense.

There are four variables that go through your head when you are asked a question. When you're asked a question in bargaining, you immediately calculate 2,000 ways they can screw you with this information. The four variables you consider are: the sensitivity of the information they're asking for; the criticality of this issue to my constituents; the level of trust that I have for the other side in terms of small "t," capital "T"; and the stage of the bargaining we are at. The worst combination occurs when they've asked for sensitive information, on a critical issue, when trust levels are low and it's early in the bargaining. If those four variables line up like that, you're not likely to tell them. I don't recommend you lie, because then your credibility is shot. Forget lying, that's stupid. Some people advise that you dance by giving half the answer and changing the

subject. I think that's a bad idea too, because the question they might have just asked you might go to the heart of a critical issue. If you dance them away from that topic, they may never return to it, and that may have been the key that gets you to the win/win solution. If you're a lousy dancer you're going to lose credibility because it's almost like lying. What I advise, and I'm sort of urging you to do, is this: When somebody asks you a question in bargaining and it's too risky to disclose the information, don't lie and don't dance. Tell them you're not going to talk about that right now. Tell them you'll give them other information related to it and you'll evaluate what they do with it. If they do the integrative thing, they will have made a small "t" trust deposit in your bank. OK now you give them a little more information and you see what they do with that. Again, if they do the integrative thing, more trust is deposited and perhaps small "t" trust might build to the level where you might be willing to tell them something in the latter stages of negotiation that you wouldn't tell them up front.

I'm spending time on this because it's really important that you understand that this style of bargaining doesn't mean you just go ahead and tell them everything. That could be injurious to your health and injurious to their health as well. Another thing people get trapped in in bargaining is jockeying for the higher moral ground. They make arguments that theirs is the more moral position; that their cause is better than your cause. The danger here is that the other party can play the same game. We do it all the time in labor/management. It's where you try to put yourself on a pedestal and the other guy in the hole. It's where the union says to management, "All you management guys care about is dirty profits, whereas we noble union people care about people, the workers." Management plays the same game and says, "Union, all you guys care about is yourselves, whereas we noble management people care about the company, we care about jobs, represented and non-represented employees, suppliers, America." I mean, it goes on and on.

It's dangerous for two reasons. One is it wastes time. Nobody has time to waste in the '90s on bargaining or anything else. It distracts you from getting to the interests. The other problem is, it really poisons the interpersonal relationship. It shows no respect for the other side at all. You're essentially telling them, "Look, this negotiation is about solving my problem. When we get around to it maybe we'll look at yours but they are really not as important as my problem." That's a hell of a basis for negotiation. The only thing jockeying for the higher moral ground is good for, in my experience, is a not so distant early warning system, it's a trip wire that tells you, "Wait a minute. Maybe we're doing distributive bargaining, which is characterized by competition between the parties before we've taken a shot at interactive bargaining, which features

collaboration.” There are times when, in making presentations on this subject, people think I’m trying to say, “Look, distributive bargaining is characteristic of old fashioned bargaining that is traditional bargaining. Traditional bargaining is bad bargaining. Don’t do it.” I’m not trying to say that. That’s too simplistic. I am saying that traditional bargaining does tend to be distributive.

Let me tell you a story that illustrates this, and then I’ll come back to this point. In the Interest Based style of bargaining a lot of people think that the outcome should be a win/win deal. That’s why it is sometimes called Win/Win Bargaining. I think that’s a terrible term because, in my experience, sometimes when you negotiate on the basis of interests, the best you can come up with is what I call a Partial Win/Win. Which is the same thing, by the way, as a Partial Win/Lose. This is sort of the same thing. By a ‘Win/Win’ I mean that all my interests have been addressed and so have yours. By “Partial Win/Win” I mean some of my interests have been satisfied but some haven’t some of your interests have been satisfied and some haven’t. Sometimes when you bargain this way, Interest Based Bargaining, you end up with a straight Win/lose. And this surprises the hell out of some people. They said, "Wait a minute. I thought this was win/win stuff." Why do you suppose that you might end up with this or even end up with this in this style of bargaining, what might cause it, you end up with these latter two? Some people say you might end with Win/lose if you’re not doing it right. Usually the blame goes to the other side. They said they were going to do it but they’re not, they’re holding back on their interests, they’re not brainstorming options, they’re forgetting that our problem is their problem. While that may be the case, in my experience the primary determining variable that’s going to impact whether you end up with win/win, partial Win/win or Win/lose as an outcome is the nature of the issue you’re bargaining over.

Some issues lend themselves more to one or the other of the alternative outcomes. I can illustrate this best with a story which is reputed to be one of Ronald Reagan’s favorite anecdotes. That, of course, will please some of you and not others. This man is walking down a country road and happens upon a little boy standing on top of this huge pile of horse shit. The kid’s got a shovel and he’s digging like crazy. I mean, the shit is flying. The man is perplexed by this so he walks up to the pile and the kid and he looks up and he says, “Hey, what are you doing?” And the kid stops digging, looks down and says, “Figure there’s got to be a pony here somewhere.” (That’s why it’s a Ronald Regan story - unbridled optimism.) The point of that story is this: In traditional bargaining, every issue we negotiate, no matter what it is, we tend to see it as simply a pile of horse shit. The only question is, who’s going to step in it - and it ain’t going to be me. Every issue we

tend to see as strictly a distributive, competitive, adversarial contest. We tend to see the negotiation, essentially, as a contest. One party's win equals the other party's loss.

In the new style of bargaining, no matter what the issue is, no matter how much on the surface it appears to be nothing more than simply a pile of horse shit, before you start pushing the other guy in the pile, you say to yourself, " Wait a minute. Let's look for the pony." A pony is a metaphor for a win/win solution, and digging for the pony is, in effect, negotiating in the non-traditional fashion. Now, as you go through the process, as you're digging through the pile of shit bargaining this way, sometimes you'll uncover a hoof sticking out of the pile. For example, it might be one of the interest items both parties checked in their caucuses. One of those doublechecked items could be a hoof sticking out of the pile. Logic dictates that, if you're looking for a pony, dig around the hoof. As you start to dig around that hoof, you may find it's connected to a leg. As you continue your digging, you may find the leg is connected to a shoulder and as you dig further you may find that that initial hoof eventually connects you to a fully functional, 100 percent intact win/win pony. And sometimes that happens when you bargain this way, sometimes you'll start out with a hoof and eventually you will end up with a perfect win/win.

It's also important for you to understand that when you bargain this way and you're digging through the pile of shit and you find a hoof and you start digging around the hoof you may find it's not connected to a leg or shoulder or anything else, it was just a hoof. The point I'm making is that, sometimes when you bargain this way, the best you're going to come up with is pony parts. Don't laugh. Parts is parts. There's nothing wrong with parts. In fact, in my experience, there are few perfect ponies out there and parts ain't bad. It's also true that when you negotiate in this fashion and you're digging through the pile of shit, there will be times when you're not even going to find hoofs. All you will have accomplished was, you moved the pile from one place to another. That's what I mean when I say you went through this whole process and there weren't any doublechecked items, no matter how many times you cycled back and forth. The point is that I don't care how good a digger you are, I don't care how hard you dig, if there ain't no ponies under the pile, you're not finding the pony. It is not your fault; it's not their fault. The best thing that this style of bargaining will do for you is it will encourage you to dig under all of those parts not matter how dismal they look to begin with. You'll be amazed at how many ponies you're going to find where you would never guess there was any ponies at all. You're going to find lots of parts and that ain't bad. Parts is parts. In some cases, you are going to end up with less than a



complete pony and in some cases no pony parts at all. As I said earlier, the primary determining variable is the nature of the issue you're bargaining with.

What we found in our research is really interesting. Even in those negotiations where they negotiated this way and came up with few parts or no parts at all, they still reported better compliance and an improved relationship - not because of the technical outcome but because of the process. If I end up being the loser or the partial loser in this style of bargaining, it's not because you were bigger and badder, it's not because you had smarter lawyers, it's because, in this particular case, one of us had to lose or partially lose. It was either my turn or the consequences of my losing, in this instance, are less injurious to the effort as a whole than if you lost. It's not like there was a pony there and you hid it from me just to spite me. I know there wasn't any pony there because I was digging with you. By the way, I appreciate the fact that you were digging. We're finding that this style of bargaining improves the relationship regardless of what the technical outcome is, and that the technical outcome is largely dependent just on the nature of the issues you're bargaining with.

There are two variables that are going to impact the likelihood of your finding ponies and pony parts. One you have no control over, as I just mentioned - the nature of the issues you're bargaining with. The variable that you do have control over is the size of the corral in which you're permitted to dig for the pony, if I could introduce yet another metaphor. The size of the corral in which you're permitted to dig for the pony is a direct function of the quality of your negotiation with your own constituents. If you just collect their positions, you've got a corral the size of the head of a pin. Good luck! But if you negotiate with them, if you dialogue with them so that they understand their own interests, you have expanded the size of the corral and chances are better that you'll be able to find whatever ponies and pony parts are contained therein.

One other matter I'd like to cover under the circumstances when there's not a pony under every pile. Some issues are rather distributive. Wages in a labor negotiation tends to be rather distributive. Not many ponies under that pile. This afternoon you're going to hear from Rug Altmansberger of Coming about goal sharing, which is an interesting twist on the gain sharing theme. Gain sharing, by the way, is a good example of an integrated solution to a rather distributive problem. But sometimes even with gain sharing or goal sharing, there is still the situation where your gain is equal to my loss. How do you solve that? You use objective external standards. If we go through this process and we can't invent solutions that work for both sides, then, instead of letting it boil down to what I think it should be versus what you think it should be,

as for example, a wage settlement, let's find out what the outside world thinks will be an appropriate settlement. That is what constitutes the use of objective external standards. The problem is that we do that now and it doesn't work very well. Under current practices management comes to the table with a wage offer and they've got objective external standards. They include what these jobs are paying at other yards and in the labor market in your area and so forth. They hand it to the union, the union says, "Wait a minute, let me look at that." And the union goes through it "That's interesting. Didn't know that. A lot of crap." Why do you suppose unions would have so little confidence in management's carefully compiled listing of objective external standards? The union suspects that management has been cherry picking. That is, they've only seen fit to include in the list those standards that support their wage offer and they've conveniently left out any standards that might not support the wage offer. The unions suspect this because management does it all the time. Unions do exactly the same thing. It's a human trait that we tend to present only evidence that reinforces our argument. What we're now seeing, as an improvement on that, is that the parties will, in advance, negotiate a field of standards. Who should we compare ourselves to if we end up with some issues where we can't find ponies? That effort also constitutes a negotiation. Should we compare ourselves to companies of our size, or companies that employ people that use our skill base, or companies in our labor market, or competitors, or whatever? You negotiate those standards first and then jointly collect the data when you get closer to the negotiation. That will take you to a situation where your positions come closer together. You'll still get a scattershot diagram or a shotgun pattern. It won't give you the answer, but it does get you closer. Then, finally, you can split the baby, or management will make an offer within those limits and the union compares it to its best alternative to a "negotiated" agreement. Unfortunately, we just don't have the time to talk about that thing called a "negotiated" agreement. Finally, it's important to know that in this style of bargaining there's something you can do to improve the competitive aspects of bargaining, not just those issues where you've got ponies and pony parts too. Thank you for your attention.

## GOAL SHARING AT CORNING, INC.

Delivered by H. N. "Rug" Altmansberger, Director, Goal Sharing, Corning, Inc.

What I'm going to talk about, basically, is a plan that's evolved over the years at Corning. It's a combination of various profit sharing and gain sharing tied together. Before we get too deep into Goal Sharing, though let's talk a little bit about the philosophy. The idea behind Goal Sharing is really that we have overall corporate performance of the company. In Corning, however, we have a lot of different units: a consumer products group, as you probably know, a wave guides group that does all the glass cable for telecommunications; an automobile substrate group that does business with the automobile industry - we make head lamps for automobiles, on and on and on. There are over 30 different businesses that we're in and we do business world-wide in about 15 different countries.

Prior to elevation to his current position which he has held for the last three of his 30 years with Corning, Mr. Altmansberger was Director of Compensation and immediately prior thereto he managed health care cost containment, group insurance, safety and workers' compensation. He also has held positions of responsibility in manufacturing planning at two Corning plants and in Information Services from Programmer to Division IS Manager. During most of that time his areas of concentration were business and manufacturing systems.

Mr. Altmansberger has a BS degree from Purdue University in Statistics, He is certified both by the American Compensation Association and by the American Production and Inventory Control Society. He also is a member of Human Resource Systems Professionals.

The issue for us, then, is focusing on the performance of all those units – that is, the business you're in and how does the individual relate to his unit. How can we in our unit maximize the performance of our unit? As far as Goal Sharing is concerned, unit performance is more important than individual performance and also small team performance. It is essential that individuals get aligned with the unit's goals before they get aligned with their small team their individual goals. If they align with their individual goals and they align with their team goals first, there's going to be some sub-optimization. If you have this team-based pay and you got a bunch of little teams going around doing team things, that's fine, and paying for team pay is fine, if it's in focus and in context of the bigger picture of where the unit's going and what is driving it. So the philosophy of Goal Sharing is to focus, primarily, on unit performance and get the individual goals lined up with the unit goals. Why we have not featured corporate profits as being the primary driver is that there's not a lot of line-in-sight in corporate profit sharing. By that I mean, if I'm in a

business unit that's starting up, let's say a new factory which is making a whole bunch of new products, how well the corporation is doing doesn't mean a hell of a lot to me. How well my plant is doing is what means a lot to me. In addition, my factory can be on a very different cycle than the overall corporate cycle.

These are attributes shared by peak performers, out of a book by Garfield on peak performers: a mission that motivates with a passion; purposeful activity directed at achieving goals; building teams and exercising teamwork; managing oneself through self mastery; focus on the task to stay on the critical path to success; and anticipating and adapting to change. Those are the attributes behind the philosophy of Goal Sharing.

Now, what's the definition of Goal Sharing? It is very, very simple-comprised of only nine words. It's a unit bonus plan where everybody in the unit gets the same percent effect. Everybody in our television business, for example- which is our State College plant plus our business group in Corning, New York-gets the same percentage effect depending on how well the television business does and how well they do against their goals during the period under consideration. The vice president of the unit or the plant manager gets the same percent as the factory worker on the floor. Obviously, they make different salaries or wage levels to begin with, but they each get the same percent. The idea behind the percentage basis concept is market value. It's based on how people are paid compared to market. It's based on long term business goals. We always joke in Corning that long term is one year and we cannot see beyond our next budget cycle. What we're really trying to say, however, is let's go three to five years out. Let's figure out those things that are really going to drive this business and drive this company, that are going to make us successful for the next few years, and let's set our goals based on those. That's what we're trying to key on. It's based on continuous improvement. Accordinally, if you don't do better this year than last year you don't get a payout. That sounds kind of harsh, but when you consider that the average payout is 7.7% on a 0-10% scale, it works pretty well.

If you're on a continuous improvement drive, getting better helps you every year because you've got a start for the next year, because you're taking the average from the previous year. Obviously, the average of the previous year, being made up as it is of some pluses and some minuses, means that all you've got to do is to keep beating the average of the year before. Goals for each unit are set by a committee, made up of a cross section of employees of that unit. It's made up of the business manager or the plant manager and a cross section of employees in that unit. They communicate the goals to the unit and they measure the unit's performance against the

goals. The goals are also submitted to a review committee for approval. They just can't set their goals wherever they want. But normally, 95% of the time, they set a good and fair goal. Now, why do we do this or why are we doing this? What is the purpose of Goal Sharing at Corning? By far the overwhelming reason is to stay in business. Over the last fifteen to twenty years, Corning has shut down twenty-some-odd factories. We went out of business because we couldn't compete in the United States or the market wasn't there. I don't mean to convey the impression that we shut them all down, because, in fact, we sold a number of businesses too. But the real reason why we had to do a lot of those things is because we weren't competing. We weren't the best in our industry. We weren't staying ahead of the competition. If you don't do that, you're going to go out of business sooner or later. The real reason why we're doing this plan, by far - and this is in agreement with the unions and everybody - is to assure our future, to stay in business. That's the reason why we're doing it. It's nice to pay for performance and involvement. That's nice and we like it. It's nice that Corning and union employees make more money. The real reason why we're doing this to stay in business.

Besides that, the other intents of our Goal Sharing include, first employee involvement. By getting the committees going, we develop partnership with our union and we get everybody in the unit focused on the key measures for that unit. The second intent is business planning. We want everybody in the unit to understand the business plan of the unit and what's driving the unit. We're very open with our employees in terms of all financials and all our data about performance of the unit and their key result indicators. "Key result indicators" is a Goal Sharing term and what it says is, is that every unit ought to have their key result indicators that are key drivers for their unit. And that's typically where the quality and the customer service measure come in. This is one of several things that makes Goal Sharing somewhat different than Gain Sharing.

In 1988, we started with Profit Sharing. We had a wage freeze in 1987 for all our salaried employees. We were not having a good year so we froze wages. Instead of giving those wages back in 1988 in terms of any base pay, we gave it back in terms of our Profit Sharing Plan on a 0-10% payout and it was based on top quartile performance. The idea being, if Corning was in the top quartile of Fortune 500 companies in terms of ROE (return on equity), we were doing well and

we should get the top of the payout. We ought to get the 10% payout. We now still use this same measure as 25% of the payout for Goal Sharing for all. Everybody in Goal Sharing has 25% silver, and that is ROE. So 25% of Goal Sharing is Profit Sharing and in our case it's ROE. So the way it works now is that, basically because Profit Sharing lacked that line-of-sight, we revised the plan so that the way Goal Sharing works now is, 75% of the payout in each unit is based on the unit goals and 25% is based on ROE, which is common to all units - and it should be understood that ROE portion of the payouts is not for continuous improvement. So, if we do a little worse this year than last year, a payout can still be made based on the Profit Sharing part, because that's really just sharing the profits. It is not a continuous improvement measure. The 75% for unit goals is Goal Sharing. For example, this year's minimum payout starts at 10% ROE and the maximum payout is 18% ROE. In the Fortune 500 magazine that just came out in May of this year, top quartile is 18.3, so we're right about on the top. Accordingly, if we're in the top 125 companies in the United States out of 500 in terms of ROE, we'll max out and get a 2 1/2% payout on the ROE pay portion of the payout. Because this way the 25% so that part is 2 1/2% out of 10%.

Now let's go to Blacksburg, Virginia, which is where we started Goal Sharing in 1988. We started working on the committee to get started for Blacksburg. Blacksburg was what we call a high-performance facility. We were trying to use it as our model facility for high performance. We had a factory that had been closed down and we were restarting it with a brand new workforce and a brand new business. We wanted to do it right. When we started up, we knew one of the things we wanted to do with our union was to write a separate contract for Blacksburg that was separate from our other contracts. The contract said that we'll have a Gain Sharing Plan and that we would have it up and running by the middle of 1990. That's all it said. We didn't say how much money, we didn't say anything else. We went through the process of forming a committee that was made up of half of the workers off the factory floor - it was a diverse group, an engineer, an administrative person, myself, a couple other people - because we wanted to try it. If this worked, we wanted to take it throughout the rest of the company. By 1989, we had figured out what goals we wanted to use. There was a cost per unit goal, there was a process select goal, and there was a customer service and a quality goal. We set the four goals and what we did is, we ran a pilot. What I mean by a pilot is, instead of using money we used recognition gifts. What we said was if, that for the last half of 1989, we hit 90% of our goals, everybody got a plant jacket. It was a brand new facility and a brand new crew and everybody wanted to have a jacket. If we hit 100%

of our goals, we'd throw in a watch also. If we hit 110%, we'd throw in a gift certificate for two to go to dinner. There wasn't any money involved, but what we wanted to do was get people's attention, and understand and get feedback from them on whether this system was going to work or not, before we ever decided to go with money. Because if it didn't work we wanted to try something else, adjust it so it did work. What we learned out of that pilot was that everybody being on the same system was very, very important. It was just as important that the plant manager was paid the same way as one of the unskilled persons on the floor. As for successful understanding, it became clear that, as long we worked hard and communicate communicate communicate, it worked. The plan was also a positive motivator for the employees on the floor.

One of the things that we heard right away as we got involved in Goal Sharing at Blacksburg was concern about the plant manager's travels. He was taking a bunch of trips and the employees began to question him. 'Why are you taking so many trips? Why are you spending all this money? That's our money. You save that and we can have that in Goal Sharing.'" It's that kind of mentality that gets going and everybody is thinking about how everybody else can help save money for the factory. Getting that attitude going is really important.

The hardest part about Goal Sharing is communications. If I don't say this often enough, shame on me. That's the hardest part about Gain Sharing, Goal Sharing, whatever payout system you're using making sure people understand what the goals are, and how they impact the goals, and how they can make a difference.

Another thing we did was to make the payout on a once a year basis. We did that for a number of reasons. Number one, we wanted the payout to be significant. It was our intent that when the individuals got their payout it was a significant amount of money, at least \$1,000 or more. That way they could do something special with it. It wasn't something they were counting on day-to-day. Number two, we didn't want to get into all the administrative hassles of measuring seasonality. You get into a lot of Gain Sharing plans there's all kinds of seasonality crap in a lot of businesses going on, at least a lot of our businesses. We just didn't want to get into all that. Number three, it's a hell of a lot simpler if you pay once a year than it is if you pay every week or every month or anything else. For all those reasons we decided that once per year was best for us. Lastly, we made the decision that ROE was 25% of the payout.

In actuality, when we started this payout, we thought 100% of it was going to be based solely on Blacksburg's performance. Towards the end of the first cycle we said, 'Wait a minute. Blacksburg has a sister plant in Germany, another sister plant in Erwin, New York and an

engineering group in Erwin, New York. They all work together. If we don't have a certain percentage of the payout based on the bigger picture, the Blacksburg people are going to put their heads down and say, "To hell with everybody else." Accordingly, our logic took us to the point where we said 25% of the payout is going to be based on corporate profit sharing. Twenty-five percent was just an arbitrary number we just happened to pick. It could be 20% or 30% or whatever you want to make it. But, that was our logic, that's how we evolved.

Exhibit 3 represents an example of how we keep track of our Goal Sharing plans across all units using this formula. Notice the goals down the left hand side:

Quality  
 Scrap/Rework  
 Cost/Hour  
 Customer Service  
 Job Cost  
 ROE

	WT	FY ACT	0%	20%	40%	60%	80%	100%	120%	140%	160%	180%	200%	Bonus
Quality	15%	85	85	88	91	93	94	95	95.5	96	96.5	97	97.5	
Scrp/Rewrk	10%	.50	.50	.48	.46	.44	.42	.40	.38	.36	.34	.32	.30	
Cost/Hour	20%	51.57	51.0	50.0	49.0	47.0	46.0	45.0	44.5	44.0	43.5	43.0	42.5	
Cust. Svc.	20%	95.8	96	96.4	96.8	97.2	97.6	98	98.2	98.4	98.6	98.8	99	
Job Cost	10%	425M	420M	420M	415M	410M	405M	400M	390M	380M	370M	360M	350M	
ROE	25%	14%	8	9.25	10.5	11.75	13.0	14.25	15.5	16.75	18.0	19.25	20.5	
			0%					5%						10%

This happens to be an example of the General Machine Shop (GMS) in Corning. It is a theoretical example, not the actual numbers. The General Machine Shop had been losing money when we started, when we negotiated with the union in 1990. We used GMS as the example because GMS can still get a payout if they did well enough to meet their goals, even though they were losing money. The philosophy of Goal Sharing is, if you hit or exceed your goals, you can get a payout. It isn't Profit Sharing directly. A start-up unit that isn't making money just yet can work a Goal Sharing plan just like anybody else. In fact, the interesting part of this story is that GMS has been on Goal Sharing now since mid-year 1991 and, finally, this year they're in the black. They're finally making money, and so they have met their goals as they went along. The bottom line is that management's got to believe that the GMS plan is good enough to drive them back to profitability over time. That's exactly what GMS convinced management. We've shut other business down.



We don't just keep businesses around if we don't think they're part of the long-term success of the company. In GMS they make a number of machine parts that we can't buy outside, and so it's always a delicate balance on how do we get them to break even, how do we get them to be profitable. What management does, from an evaluation standpoint, is review the payouts every year from high to low. That is, who got the most money to who got the least amount of money. They've never had a problem with GMS failing.

Getting back to this example, you'll note that Quality is weighted at 15%, Scrap/Rework is 10%, Cost per Hour at 20%, Customer Service at 20% and the Job Cost is 10%. Forty percent of the payout is based on financials, namely Job Costs, Scrap/Rework and Cost per Hour. Then 15% is on Quality and 20% on Customer Services. Roughly speaking, that's about right for that kind of a business. Then ROE, another financial measure at 25%, comes into play. How do we work the payouts? Previous year actual, "PY ACT" stands for previous year actual. Typically, the previous year actual and zero power are exactly the same because that's continuous improvement. Other than the same you need to have a good business reason why. The 100% line is usually budget. You ought to have about a 70-80% chance to hit that. It shouldn't be a give-away, it shouldn't be real easy, but it should be attainable 70-80% of the time. At the 200% line, you ought to have a 30-50% chance to hit it. That means that you ought to have an outstanding year in order to hit it, but it ought to be attainable. It should not be impossible.

Those are the ground rules that we give to all the units. Every unit has the same ground rules as to how they set their goals. And then basically all they do is interpolate in between. You set your 200% point, your 100% point and your zero point; then you can ramp up or ramp down depending on whether you got a string line or a curve or whatever you got. Let's take Quality, for example. Quality starts at 85 and goes to 95 at midpoint. It then goes from 95 to 97.5 at 200%. That's just to give you an idea that it could be just as tough to get from 97 to 97.5 as it was to get from 85 to 88. That is, there's just as much stretch between those numbers because those are fair stretch goals. Numerically, they're not the same increments, but they're still fair stretch changes between increments. The unit has the ability to set those the way they see fit based on their business and what's right for them. They lay out their goals in terms of where they are and what they're shooting toward for the next year.

How do we pay out based on this? Well, it's very simple. Let's look at Quality in this example. If we're in the five percentile, 5% of 15% weight is 0.75. So, if we miss every other goal in the book and just hit the quality goal at the mid-point, the payout is three quarters of pay.

There's no take-swaps in this thing. If you miss the goal just no payout. We don't subtract or anything like that. If you hit the goals, you get that payout. Whatever the unit does every month or every applicable period, the standings are posted on a big bulletin board for the employees to see as they walk into the factory. Most everybody knows very well how to read this stuff, because they want to know what the bottom line is. Hopefully, they'll go back and figure out how well they're doing and what they're doing well and what they're not doing well in. Then, at least six times a year, management, usually in the person of the plant manager, will talk to every employee in every factory going around talking about here's where we are, here's what we got to do to improve, etc., etc., to keep the information up front, to keep communicating.

At the plastics plant in Oneonta, New York, instead of percentages, they express their plan in terms of dollars. They have four goals plus ROE. Selects, which is the process of how much they make right the first time; Compliance To Schedule, which is their customer service measure; Cost Per Piece, which is their current unit cost; their Part Per Minute and their quality measure, and then ROE. They post how each one of those goals is doing as the year goes along so that anybody can track at the bottom of the sheet how their performance has been. There's a story I always like tell about Oneonta. At about the end of the first quarter in 1993, Oneonta was doing it well on the first three goals- Selects, Compliance to Schedule and Cost Per Piece. It was not doing well on Parts Per Minute, which the first three goals had good numbers by the end of the first quarter, the Parts Per Minute goal was still back around the starting point. So the Goal Sharing committee and the plant staff issued a challenge to the whole factory that, if by the end of July, they could get that quality goal moved up to a certain figures, the committee and the plant staff would wash everybody's car. It got a lot of attention. Guess what? They got the quality goal to the target we set. I even went over and helped them wash every car, about 180 cars, by hand. The bottom line was that at the end of the year, the payout was over 9%. We had better quality as a company for that plant and we had a better payout and a better overall performance because of that little excitement.

I only use that as an example. Whatever works at any factory or whatever works anywhere, whatever works to get people excited and to get people turned on to do a job better, why not try it?

The following chart (Exhibit 4) shows the results at Blacksburg over a five-year period. The last year, 1994, they had negotiated an increase in their payout, from 10% to 13%. They're the only unit in the company that has a 13% payout. But as you can see, every year they got better

than 8% payout. An 8% payout is about a month's pay, which isn't bad. In 1992 they did so well on their goals that, in addition to the payout of 9.8%, they exceeded some goals over the 200% line

Maximum side. We always said we'd reserve judgment but if it really was meaningful performance we would consider paying for it. In this case, we gave everybody an additional ten shares of stock through our Employee Stock Purchase Plan.

In the first three years of the plan there was anywhere from 38% to 85% improvement in every one of those goal categories and, overall, a 46% cost improvement. Clearly the plan more than paid for itself. We started Blacksburg in 1990 with a payout of 0-10%. We negotiated Goal Sharing plans for the rest of the company with the union in 1990. Payouts started in 1991. In that year the plans called for payout levels from 1 1/4-2 1/2%. It then went from 2 1/2-5% in 1992, and then 0-10% in 1993. We moved all our salaried employees from Profit Sharing over to Goal Sharing. So, by 1993, we had everybody in the company on the 0-10% payout. So we only have data for the whole company for 1993 and 1994. In 1993 there were 57 units and the '93 overall average payout was 6 1/2%; the average payout in 1994 was 7.7%. None of the 57 units got a 10% payout that year because ROE did not max out. If ROE doesn't max out, you can't get a 10% payout. At the top, two units got a 9.4% payout and one unit at the bottom got a 2.9% payout. So everybody, at least, had some sort of a payout, even on their unit goals. There was no plan that had a zero payout on their unit goals and there was no zero payout on ROE. In 1994, the main difference was that ROE did max out that year. Therefore, there were three 10% payouts, including Blacksburg. For comparison purposes we view Blacksburg as getting a 10% payout just to keep them on the scale with the others. In reality, however, as I noted earlier, their max attainable is 13%. With the three of 57 units maxing out at 10%, with the low end at about 4.6% and the average for all 57 at 7.7%, I think you'll agree that that is a good distribution. As far as I'm concerned, when we look at MaryKay plans or any other bonus pay plans, we don't see a pay for performance distribution that's as good as this. I don't know how the other people do, but that's a pretty dam good distribution of bonus payout, from high to low.

one of the other differences between Goal sharing and Gain sharing is cost savings. In 1994, if you took our manufacturing plants at a midpoint payout of 5% for everybody, it cost us \$17 million. **If however, we realized the savings that those financial goals are based on, the savings would be \$88 million. And so the overall ratio is 4.93 to one. That's a good deal. If you pay out one dollar in variable cost for that kind of a gain this year and you get that gain every year thereafter, it's a good deal. It's a good deal because you get that gain each year and you're only paying it out one time. But anyway, overall, when you have a unit that performs at a Savings/Cost ratio of 11-1 versus a unit with a 1-1 ratio**

in a Gain Sharing plan, the unit with the 11-1 ratio would get eleven times more payout than the unit with a 1-1 ratio. In our case they get basically the same pair of stretch goals and, therefore, they have the same chance for a 0-10% payout. There's a different philosophy in terms of how goals are set. We set the goals based on fair stretch attainable criteria (Goal Sharing) not on how much money is shared (Profit Sharing). And that's a big difference.

If you're into customer surveys and that kind of thing, we do a survey of the employees at Blacksburg every year in order to ascertain the climate there in regards to Goal Sharing. The results of a recent survey revealed an 87% favorable result, 8% neutral and 5% unfavorable. If you're into the climate survey business, you'll appreciate that those are really terrific results. Anything over 75% means you're doing a great job. So Goal Sharing is very, very well received at Blacksburg.

Another part of the survey links into how the employees regard the stress they work under. The results were 52% favorable, 18% neutral and 30% unfavorable. You can see there's a lot of stress involved. One of the reasons for that is they're working twelve hour shifts. In addition, it's a new workforce and they've got a lot of young married employees. Those kinds of conditions, of course, create a lot of those kinds of issues. In conducting our surveys ask different questions in different ways in attempting to encourage people in each unit to ask questions of the people in their unit and get feedback on how well the plan is working. one of the questions is, 'Have your activities within your department been influenced because of Goal Sharing objectives?' The results have consistently been favorable, with better than a 5 to 1 ratio of positives to negatives. That says a lot about Goal Sharing. It is making a difference. It is driving the business. Some of the others generic questions like, "How do you know if Goal sharing is successful?" "Does it capture attention and generate excitement?" "Is it understood?" "Does it Communicate the business goals?" 'Does it pay out when it should?' "Does it not pay out when it should not?" And "Overall does the unit perform better?" and 'Does@ning perform better because of it?' The answer overall, so far at Coming is that it finally is making a **difference and is performing well. We like it and we're keeping it, at least for next year. I won't tell you how long it will go on, but at least one year at a time, and we're going to do it again next year, for sure.**

**If you are thinking about setting up a Goal Sharing plan up in your unit or your company, the first step is to decide how many different Goal Sharing units you're going to have and, for each unit, select a Goal Sharing committee. That committee should probably be eight to ten people, should be a cross section of your unit and it should include the overall head of the unit. When I say it should include a cross section of people, I mean people from all the major departments within the unit, young, old, skilled, unskilled, whatever the mix is that represents the various facets for your unit. Go through it and**

educate that committee to get you started and get you up to speed. Then have the committee go through a brainstorming process and identify goals and weights. They should then pilot and review it and test it out before you go on. After you've piloted and reviewed it and you're sure you're ready to go, at that point, and not before that point try to get approval from management and, where applicable, the union. Once you've got approval, communicate, educate, track and report. Once you get it started the first year, the second year and the third year is pretty easy. Once it's rolling it keeps rolling. Typically you don't want to make changes. Ninety percent of Goal Sharing plans keep the same major categories every year. Every year, however, you do have the ability to change and adjust any goals you want to. So if you're not going in the right business direction and you want to scrap your plan and restart a new one, you can. At forming the ability to make changes is provided through the annual Goal Sharing review process. That process requires that all the plans be signed off by the applicable Goal Sharing committee and the union and management. Then comes the meeting where I review all the plans to make sure they're technically correct.

There are two different review committees, one for manufacturing and one for all the business and Staff groups. The manufacturing committee is made up of five union officers, three national and two local, and then five manufacturing managers, each from a different division or group of the company. What you have then is union and management jointly reviewing fair stretch goals and making sure that no one is sandbagging. It's a simple way of making sure that everybody's got good fair stretch goals out there and there is no inconsistency across the top.

We do the same thing with staff groups, with the exception that with that group we use the top management group to review all their plans. Over a three-day period this year we reviewed 58 plans. Typically one management and one union person stands up and their plan. They are given fifteen minutes to tell us what are their fair stretch goals. And in about 5% of the cases we reject the plan. We say, "Sorry, Charlie. Time to go back and redo yours and try again" Just the fact that people know that we don't approve the all makes sure that they used a sharp pencil when they come see us. It really helps the process and the review process.

We think Goal Sharing is superior because of the use of key business measures, the provision of a line-of-sight for each employee involvement, the establishment of fair stretch goals and the provision for priority balancing where you can weight the goals based on how important you think they are to payout.

Some of the differences between Gain sharing and Goal sharing are:

**Gain Sharing has a cost formula, whereas Goal Sharing has a business focus.**

Gain Sharing is typically an historical base; Goal Sharing is continuous improvement base.

Typically, Gain Sharing has somebody advancing formulas from the outside typically, Goal Sharing is committee driven - we do it internally.

Gain Sharing is usually manufacturing only whereas, at Coming, it is throughout all of our businesses - it's for the entire company.

Gain Sharing has a fixed formula for funding; we have fair stretch goals.

Gain Sharing the payouts are frequent and small; our payout is annually, which is a lot longer than Gain Sharing plans, and our payouts are significant.

As to long term success, both Gain Sharing and Goal Sharing have high risk to keep them going and keep them alive, and the single most important factor whether it is Gain Sharing or Goal Sharing is **communications**. Communications is what *makes* these plans work. How well the unit communicates makes a big & difference on how good the payout is.

# HUMAN RESOURCE INNOVATION AND PRODUCTIVITY IMPROVEMENT AT BOEING

Delivered by Henry Shomber, Chief Engineer, Design/Build, Product and Process Integration, The Boeing Company

I just met one of your fellow participants, Gordon Baxter, a few minutes ago. What you people don't realize is that he's an undercover PR guy for the Boeing 777, the airplane he just rode on from Chicago to Dulles. After I talk to you about the design effort and the teaming and the changing of the corporation that led to the design, at the break you can discuss with him how well it came out. The Boeing Triple Seven is the airplane we want to talk about. What I'd like to do is kind of put it in context, tell you a bit about the airplane, and then focus on what we did different in the design and manufacture of this airplane. I think your interest would be to focus on the teaming aspects of it. I'm not going to really give you a technical diatribe, except this has been a big piece of my life for about six years so if I get carried away, bear with me.

I thought this was a big product until I was looking at this tanker model that you've got down the hall down here. Your industry builds big products. But in the world of aircraft, the Triple Seven is not too shabby. It's made up of 100,000 numbered parts, which appear, on average, about six or seven times. We, therefore, think it is a 600,000 or 700,000 parts, held together with about two and one-half million fasteners whose goal is to keep those 700,000 parts in very tight formation.

But before we go further, let me take you back. In 1989, when we really were working on the formation of this program, the airlines were doing very well. When we looked out of our window, there were customer line up in the parking lot with money hanging out of their pockets and they wanted to buy airplanes. The order books were full and the cash register was ringing. At the same time, we were going to redesign the company. We were going to change the way we did the job. Naturally, there were

In his current position, Mr. Shomber is responsible for guiding the implementation of the new design processes selected for the Boeing 777. He is responsible for aiding the integration of engineering designs and assisting communication between those who design the airplane and those who are building it. Toward this goal, he leads several 777 teams, including the design/build steering team, which helps resolve procedural issues, and the design/build communications team which disseminates important engineering information back to the design team.

Mr. Shomber earned two degrees in aeronautical engineering from the University of Wichita - a Bachelor of Science in 1958 and a Master & Science in 1963. Later, he achieved doctoral candidacy in flight control theory at the University of Washington.

a lot of folks who said "Why? Why would you do that?" So keep that in mind as we're talking about this.

The challenge that we had was captured really in our mission statement which contains three themes. The list is "working together," and that's really what I'd like to share with you today. Working together to produce a "preferred" (second theme) new airplane family together, and that's really what we're going to focus. We measure "preferred" in terms of real orders, ink on a contract, money piled on a table.

By the way, I forgot to bring order blanks, but if any of you want to place an order, we can manage that. It takes somewhere between \$125 and \$140 million and you too can own one.

The third theme is the "new airplane family." The most efficient way to design an airplane family is to try to design the first one with as little unneeded margin as possible. I'm an engineer and you engineers here will understand that, engineers, we always want to make sure our part doesn't break. We always want to make sure our part performs a little better than desired. I think of that as pad. So the typical way you design an airplane family is, you design the first one having as close as you can to the target design objectives and then go break it. Literally. In the airplane industry you break it by, for example, fatiguing the fuselage. We try to understand exactly what the margins are, and then we can very very efficiently grow that airplane, and that's the way we build a family.

Well, how were we going to do this? How were we going to accomplish our mission, our working together? We are going to use skilled and motivated people. The second goal was to have a service ready airplane in 1995. Now, we first crafted this vision about January 1990. Service ready. Well, some of what I'll talk about today sounds like motherhood. We were really trying to get the corporation's attention to change the way we're doing it. Technically, I think we build the world's finest airplanes.

We're faced with an interesting challenge though – we're competing with five governments, sometimes they're called Airbus. The social goal of those five governments is to build airplanes. That's one of the ways they keep their people employed. If they can sell them, great. If they have to give them away, that's OK. And they've done it, they've done it repeatedly. Our social philosophy in the United States is a little different. We will pay people not to work. Those five governments pay people to build a product and then, if they have to, they'll give the product away. Boeing is a company. Its pockets aren't nearly deep enough to compete with five governments. The question then is, "How on earth can we do this?" Well, one of things we had to do was to figure out how to reduce our costs. We had to bring our cost structure as low as possible. The airline company, when it buys an airplane, literally doesn't



care what it costs us to make it. That's of no interest. What they'll tell us is how much they will pay for the airplane, because they recognize they're buying an article of production that's going to move people and things from point A to B. The reason they buy, and the reason they do what they do, is to make money. They can figure out what they will pay for the airplane; our goal then is to get our costs below that. If we want to stay in business, our costs have to be below what they'll pay.

Now let's consider the term "service ready." We build a fine airplane, and we have for years, but not a perfect airplane. I'm going to make some comments that could be interpreted as negative, but they're not. It was an attempt to wake up and recognize some opportunities we had. If you purchased a 767 when it was a new airplane, it included some new breakthroughs in digital flight management systems. If you were the early customers, we finished it three years later. It is a little bit like when you buy a car which has a cruise control option. Three years after you take delivery, the dealer calls and says, "Chuck, if you bring the car in, I'll give you the rest of the cruise control." Now, that's not service ready. On this bird, we said, "We want it service ready out of the box," meaning that we want it to do what it's expected to do when we hand the keys to the airline.

We committed ourselves to a discipline commitment process. I'll explain what that means. Disciplined commitment process. The leading edge of our business activity is to sell. When you're selling something, it's really hard to be disciplined. The temptation is to promise whatever the customer wants. And for years what we really been operating is a custom airplane shop. It is very, very, hard to find any two airplanes in our factory that look alike, even if they're going to the same airline. Well, that costs us money. Ultimately, it costs the airline money. It makes it very difficult to have any learning on the part of the mechanics that are putting the airplane together, because they never do the job exactly twice. So we said, in this program on the 777, we to be really disciplined. Now, you have to meet the customers, but don't promise the moon if you can't deliver it. Be really careful.

Now, what do I mean by customer? Initially it's the airline. So the first place this discipline of commitment is going to show up is in our dealing with the airlines. The second piece of this is to meet product and process commitments. Once I've promised Chuck something the next goal is to do it. Just go do whatever you promised to do. The first customer is external, it's the airlines. But then we have internal customers.. We have customers between engineering disciplines. There are ten engineering disciplines that release stuff in the design of the 777, ranging from specifications for electronics to data sets for the structure. Another customer is the factory. Engineering doesn't build a lot. We don't sell a lot of engineering at Boeing. We sell a little bit, but a tiny, tiny bit. What we sell are airplanes. Manufacturing, the second big tong of the company, builds the airplanes. Well, what if we listened to

manufacturing, what if we asked manufacturing, "How can we design this so it's easier to build?" What if we brought mechanics off the floor that are having to work on it and have them tell us how do we change the design so it goes together easier. So that's what we mean by disciplined commitment. Be disciplined in what you promise and then just do it. And, of course, the goal in this business is to make money. We set a break-even target.

And finally the mission statement includes the exhortation have fun. Phil Connelly, who was the General Manager of the 777 Division at its formation in January of 1990 and is now President of Boeing personally included this item have fun. Now, I've rattled around Boeing for a lot of years, coming upon 38 years, and it has been fun. I was a kid aerodynamicist when I came out of college. I thought I'd died and gone to heaven when I went to work for Boeing. I was given total responsibility for a wind tunnel test. I would have paid to work there. It was just a blast I had resources at my disposal that I couldn't imagine getting. But Phil was trying to figure out how everybody engaged in this activity could have fun. And I'll try to show you some silly examples about why you want people to have fun. It's not subversive, it's just a recognition of fact. When we're having fun we will do better work, we will do it with more energy and we'll do it more consistently than if we're whipping each other to get it done. What we tried to do was to address the question, "How do we engage the energy of the 10,000 people (which is about where it peaked) that are going to design and build this airplane?" And that's really what having fun is all about. Do not equate having fun with not working. Equate having fun with working harder than I worked in my life at Boeing. But it's been a blast. The six years of the hardest work, and yet the most fun as we tried to take the corporation and make a heading change in the way we do business.

Now, let me give you a few more facts about the airplane. It's a twin engine airplane. It incorporates quite a bit of new technology. This is just a summary of the major changes for us in the commercial airplane industry as to what's in the airplane. The cockpit is what we call a glass cockpit, as it was on the 747-400. On the 747-400, however, it was a 15-inch deep cathode ray tube similar to a television set, and here it's done with about three-inch-deep flat panel displays. It's fully fly-by-wire. Our first commercial airplanes were all axes or fly-by-wire. The 757 and 767 use fly-by-wire spoilers. It's the first airplane to be built in the commercial world for Boeing that composite has primary structure; the empennage is all composite. The wing span is about 200 feet, just 11 inches less than a 747. The fuselage diameter is 20 feet and the airplane length is just under 210 feet.

It comes with any one of three engines, Pratt Whitney, General Electric and Rolls-Royce. United just put three airplanes in service on Wednesday, June 7. The inaugural flight was from

Heathrow to Dulles. They bought the Pratt-Whitney engine. It's interesting to me – British Airways, which will go into service this Fall, bought the General Electric engine, not the Rolls-Royce engine. And I think Cathay-Pacific is the launch customer on the Rolls. Now, have any of you ever ridden in what I'll call a single aisle Boeing airplane, like a 737 or a 757, typically six abreast? That fuselage diameter is 148 inches. It isn't a circle, it's a double bubble. The upper bubble is 148 inches diameter. The cowl diameter on a Pratt engine is 144 inches, on the GE it's 156 and on the Rolls it's 152. I think of these as six abreast engines because, basically, the fuselage you're sitting in, if you're in one of our six abreast, single aisle airplanes, is the size of the engine on this airplane.

We briefly talked about designing a family. This is what we mean by a family. The airplane that's in service now goes 5,000 miles or so and carries about 300 passengers. We've designed and have begun building what we call the "Bee," which is simply an airplane that takes advantage of what we've learned, literally in tests when we broke the wing on this one, to grow it in weight and fuel, which translates into range. We've begun design on what we call a "Stretch," which is where we put some doughnuts in to lengthen the fuselage to carry more passengers and drop back to the range capability that that airplane has now.

Now, let's come back and talk about working together. It began in 1989, when we chose eight airlines that we thought could utilize this airplane as then envisioned in their route structure profitably, that is it would serve them well over the distances that they move people and things and with the number of passengers that we were designing the airplane to. We've always engaged the customer, the airline, though we traditionally did it one at a time. We'd sit down with you, we'd do an analysis of your airline's route structure, we'd dialogue with you about what kind of new airplane would serve you well. And then we'd go home and adjust the design and sit down with you for your airline and then with you for your airline. Now what happens as we go down the line, we're starting to change the design as we're listening and trying to dialogue so then when I get to you I've got to explain why some adjustments have been made. I'm trying to explain their airline operation and their motivation preceding a change.

Then we thought, "What if we just put all of them in a room?" The idea was to bring those eight airlines together in a room and sit together and talk about it. When we approached the airlines they said, "No, I don't think so." They worried about exposing some private aspect of their business to their competitors. The thinking was, how on earth could they have a dialogue with us if they're sitting in a room full of competitors? We explained that, as to those things that really are necessary from your competitive point of view, we'll have a private discussion. In the fundamental design of the airplane, however, we want you to sit with us, around the table, in effect, and let's talk about the airplane. And

they did it, and it worked beautifully. We were no longer a messenger going from airline A to B. Airline B heard what airline A said and airline C heard what airline D said and why. The result was a buy-in to the design changes on the airplane. It really gave us support that we couldn't have achieved any other way. So the first way that working together showed up was working with these eight airlines. Most, but not all, of them have bought the airplane. What we were also trying to do was take a step toward disciplined commitment. Again, selling is tough - the customer wants everything. Our dream was this: If we could sit together with some typical airlines and think about this airplane, the goal was to design what we'll call a more comprehensive basic design that, out of the box, came closer to meeting the needs of that set of airlines which we felt was representative of the market for this airplane. And anything that we couldn't include in the basic airplane but that we thought had multiple interest or potential interest from other airlines, we'd include in what we called a catalog. We always have a catalog but here we would try to make it much more robust and more comprehensive. The goal was to reduce what we'll call unique options. We had a saying around the program, "No chainsaws allowed." I'll tell you where that came from. Today, in most of the other products we make, if a customer needs something unique, in effect, we've got to tear the airplane design apart, design the new thing and put it in. We call those "customer Uniques." The goal here was to push them out. How well did it work? It worked like a charm. We got dramatically fewer "customer unique" requests on the 777 than on any of the previous airplanes.

Having fun. Boeing is a conservative company. On one occasion we brought into a hangar, in a Boeing field, 3,000 folks who then constituted the 777 team, and we had a football rally. The top management of Boeing attended wearing baseball caps and colorful jerseys. Now, I'd never seen people of that rank and status at Boeing dressed like that before. The company brought in marching bands and a television sportscaster from one of the local television stations to MC the event. We had football jerseys for management people. Management people were walking up and down the aisles and tossing popcorn and peanuts into the crowd. There were boxed lunches and in every one was a small cow bell or a whistle. This was Boeing? It didn't compute. Typically, when we launch a program at Boeing, the board of the corporation decides and then announces the decision at a press conference. Well, we were making a change here. What was happening here was that this crowd of 3,000 people in this hangar were waiting on the decision on of the board as to whether we were going to build the airplane. Now, I don't know anything about the shipbuilding industry. But in the airplane industry-or at least at Boeing, that's the only one know anything about-the ramifications, launching a new airplane, are unimaginable. I have never made a decision that has the potential ramifications on my personal life that

launching anew airplane has on a corporation like Boeing. We talk about betting the company. That's not a trite phrase, that's what it boils down to. What you need is a pile of dollar bills, several billion high, and you're going to bet that you can produce an airplane that will meet all of its objectives, that the customer can put in service, because you don't get any money to speak of until you start delivering them. We don't build prototypes. What you do is, you design this airplane, and you turn on the cookie machine, and you start stamping these machines out. We had nine of them in flight tests. We're working on airplane number 27 right now, as we speak. United has taken delivery of three of them and they went into service last Wednesday. Well, now What's happened in the interim? Phil Connelly simply had to keep going back to the board, saying, "It's really great. It's going great. Would you send some more money?" Then next week it would be the same thing 'Would you send some more money?' It takes an action of the Board of Directors for us to even offer the airplane. The offer is couched in a whole set of contingencies, like, if enough people don't express interest, we're not going to do it and there's no penalties, and so on. But it takes a board action to offer it.

In October of 1990, the board authorized us to go ahead. Now we're really serious. We've been designation it for a year, we've got thousands of folks engaged, but we're not really serious until the board says do it, because then the expenditures really begin. Engaging those 4,000 or 5,000 engineers is small change compared to what we just actually start going ahead. Now we're getting serious, we're building factories, we're building big tools, we're starting to think hardware. And, as I said, there are no prototypes in our commercial side. That first article is a production article. So you tool up and plan for your peak Production rate of seven airplanes a month. We postured ourselves and we facilitated for seven airplanes a month

I'm now going to introduce you to a new paradigm. I touched on the fact that, when we started this in 1989, the airlines are lined up in the parking lot with money in their pockets to order airplanes, and there were a lot of folks inside the company that said, "Wait a minute. Why do this? Isn't it a divine right of Boeing that it gets 60% of the market?" Well, not on your life, even though we had done that for years. We had averaged about 60% of the commercial market. But there's no guarantees in that. I also talked briefly about Airbus. We had to change. We wanted to improve the quality of the airplane that we delivered. We wanted it to be just as good as you expect any consumer product to be when you buy it. When you buy something, if you're like me, you expect it to do what it said it would do. Just exactly what it said it would do. I don't want to get home and discover that something is missing. I don't want it break early, all of the things that we've all experienced So we said we want to do a better. The reason is very simple. It's to remain competitive. The way we're going to do it is improve our quality. As we

improve our quality, it means that job doesn't have to be done six times in the factory. The mechanic will only have to do it once. As it's no longer necessary to do the job six times, our costs are going to come down. And as we are really confident that we're not going to have to do it six times, the flow time will come down.

How can we measure whether we're doing this or not? We put one metric in place. We wanted to cut in half the change, error and rework on this airplane compared to a 767, the previous best airplane we'd ever built. Now, if we had never built an airplane before or maybe Boeing built one or two, taking on that kind of a challenge might have been understandable. But we've been building jet aircraft for decades, and to make the challenge more daunting I really believe it when I say we build the world's best. So when we said we're going to cut in half our previous best, the eyes of a lot of folks on the team just rolled up behind their eyelids and they said "You're out of your mind. This can't be done." In actuality, for some parts of the airplane, instead of cutting it in half we reduced change, error and rework by 80%. The poorest achievement was 67% reduction in change, error and rework. What I mean by change is if, for any reason after I have released the design, I make a change. It could come from the fact that an analysis was done later than it should have been and we've already released the design and we're building the parts. At that point maybe the stress analysis group comes back and says, "Oops, it's too weak. You got to change it." Another example would be if it's hard to put together and the shop puts forward what we call a Request For Revision, because they want to make it more producible. Or it could be just a screw-up and when you try to put the parts together they don't fit, or they don't line up. Any of those things would constitute a change. Usually the maintenance would show up after it goes into service. We're just entering service so the jury's out on that. So a change occurs if we can't deliver or it's wrong or we change our mind.

Now one of the ways you can measure change, error rework is to compare the number of drawing sheets on this airplane and relate it back to the 767. In building the 767, the ratio of revised drawing sheets to new was 4.4. In some sense you can say we design the airplane 4.4 times to build the first one. Now, of course that isn't right, because we didn't totally revise all of those, but you made some change. Every time you make that change, the person doing the planning or the person doing the tooling or the mechanic building the part has got to start over. So there's a cost associated with that. 4.4 was our best previous experience. We set our goal at 2.2 one half the previous best. I haven't plotted it recently, but we exceed the goal and are coming in at about 1.7.

That's one way to measure of change. Another way is to go look in a factory and look at rejection tags or NCRs. Our language is really funny, or maybe I'm just getting to be old gray hair.

A rejection tag is something that speaks to me. I understand what that is. But we've got a new term and it's called Non-Compliance Report. Somehow it's less offensive or something. It took me a week to figure out what it meant. But that's what "NCR" means, Non-Compliance Report. I don't know what's wrong with rejection tag - it really speaks. Here again we're comparing the experience on the 777 program with the 767 program. It is important to note, however, that the 777 is 44% bigger than the 767. So, if the experience were comparable, you would expect more rejection tags on the 777 than we had on the 767. Contrariwise, however, according to my most recent data. Back in February, we were experiencing in the factory more than 50% fewer NCRs than on the 767, for an airplane that's 44% bigger. Those are the two ways we use to measure change. Before getting to the meat of the change process, I needed you to understand the goal the objective of the 777 program. I might add also that there is no room for conservatism in the design of an airplane. If you design conservative airplanes, it's called a truck because it'll never leave the ground. It's heavy and you drive it from point A to point B. I repeat that there is no room for conservatism when you design an airplane. The goal is to exactly meet all of the requirements of safety, realibility, maintainability, weight performance, so there's just no room for conservatism.

Now let's address the question of how we are going to cut in half-remember that single metric -the change, error and rework. We figured that we had to put something in front of everybody that was really straightforward, something that could be measured to reduce the change. We picked the following seven preferred processes: Colocated desig/build teams; Concurrent product definitions; Integrated schedule; 100% digital product definition; Digital preassembly; Intq@ed work statement; Hardware variability control. Those are listed in order of priority, at least in Shomber's view of the world.

Colocated design build teams. A really simple concept. Bring together the people thar need to be there to effect the design.

Concurrent design definition. I'm not going to talk much about today's, that's where two work in parallel instead of serially.

Integraded scedule and integrated work statement really are simply capturing that current product definition that is what the design teams are going to do.

Digital product definition and digital preassembly, which are the things that have caught the most press on the airplane.

**The next question is how to incentivise? Within the company we use a word called performance management. You can think of it as an informal contract between you and your boss or bosses. Twice a year we write down, "Here's what I'm going to do and here's how I propose to do it." Superior and subordinate then get together and go over this until both agree, "Yeah, that's what Shomber's going to do, and this is how we're going to tell him to do it." And we sign it and we come back in six months and**

we say, "How do you do, Shomber?" And I score myself and you evaluate my scoring, so we have to again come to agreement. Then we update it or rewrite it for the next six months. We've been using that within management for some time. We wanted to sweep it into the engineering organization. Now, we just did that a year ago because our engineering is a union represented organization. Though they totally support what we're doing on teams, they were a little uncomfortable about the issue of making performance subject to teams, which is really what I wanted to do. I wanted everybody's performance management to reflect at least 50% of a team effort. We talked to a lot of companies about this and Chrysler tells me that they do that. On their teams, everybody's score depends 50% on how they perform as a team member. We toyed with trying to make raises, merits, responsive to team, but we couldn't get our arms around that in time for the program so we said, "We got to push that aside." I think however, that it's coming I think it's necessary, because, see, I think what we've done is really just plain common sense. If we come together as a team collectively, we will be able to do a lot more than any one of us can do individually. We each bring some insight to the problem. Another issue that's really challenging is who's in charge, who gets to decide. We wrestled with some of those issues, but the pay thing got set aside.

So the way I think of our incentivising people was, we engaged them in the game so totally through orientations and having fun. They wouldn't be kept away. Choosing the people to join the program was done by ten chief engineers and the then Vice President of Engineering. He personally became totally involved in the interview process. Two of the people that he interviewed decided, no, they really weren't interested. I emphasize the importance we placed on the selection process because what we were going to do was, we were going to totally change their life. We were going to totally change the way they would do their job, totally change the way they related to other people in the program, totally change the tools that their people would use and, oh, by the way, all this while doing a design of the most complex airplane ever designed. And couple of guys said, "No, I don't think so, I'm sorry." Our feeling was that that's OK. It's a big company, there are lots of other places they could work, and that's what they did. One of the most dramatic ways we changed those chief engineers' lives was to change what they were responsible for.

Let me digress a moment. Another way we incentivise the whole team-and when I say "the tea," I'm thinking not only of the Boeing people I'm thinking of the major suppliers who, on their nickel brought their engineers, their manufacturing planners, their toolers to Seattle. Worked under Boeing-led teams for as long as two years, in some instances, until the corporate package was ready to go home, and then they finished it. That was the way a lot of the suppliers made their investment, so



they came. What does that suggest? It suggests a buy-in on the part of the suppliers' managements and it suggests a buy-in on the part of Boeing's management. What I want you to focus on is the fact that senior management at Boeing physically signed on to this drastic new way of doing business. Senior management included the General Manager of the division, the VP of Engineering, the VP of Finance, the Vice President of Operations and the Division Assistant General Manager. They all personally bought into this. We had top to bottom buy-in by management at Boeing, and it showed in a lot of ways. In 38 years at Boeing, I have never seen the investment in training that we put in place here. Now, there were hundreds and hundreds and hundreds of hours per person to learn how to design using a special technology. But that's kind of\_ because that's a technical issue. What I was struck by, and I was responsible for part of this, was the people training. That is, teaching people to live and work in teams. In the company, we had some corporate designed teaming classes, seminars, curricula. On examination we decided, however, that that wasn't what we wanted. So we actually pulled out of our central training organization several professionals, brought them into my organization and using a team that sliced across the Triple Seven organization everybody from Finance to Customer Service, we crafted our own design/build team curriculum. We created a three-inch notebook of viewfoils that was the curriculum. Then we taught the chief engineers and - the piece I haven't talked about yet - their partners, the manufacturing engineers and those folks then delivered the training. They trained their people. We trained the chiefs and the chiefs trained their people. I was trying to do several things. Understand, I was in a really funny position. I'm kind of standing off to the side and trying to persuade these thousand of folks that's it's really OK to do thing differently and we're going to really change your life, but it's OK, just keep doing it, it's hard but it's OK, just keep doing it. Now, everybody that I've met at Boeing in these 38 years really is of the right mind. They want to build the world's best airplane. So I'm not presuming anybody is malicious. But they tend to be conservative; they want to make sure the job's done. So when you stretch how do we make sure that they're going to stay stretched? We figured that if an individual's boss is talking to him about, this is what we're going to do, this is where we're going to come together in teams, that is the objective of the teams, this is what the teams were empowered to do, then we've taken a little step towards really underscoring teams - the notion that teams are OK. It must be true, because my boss, the man who's going to review my performance individually, is telling me so. I couldn't get the team concept as a formal part of performance management. But the use of the chief engineers that were meeting those disciplines to deliver the training delivered a kind of a subliminal that teams are OK. In fact, the message that came across was,

"I expect you to work on a team and I'm going to train you today on how to do that." So that was another way we did it, in addition to getting buy-in from the top.

We ran into no opposition from any of the people who were in the union. The design of this process engaged them, mostly engineering because that's where the biggest piece of the change was made. We also moved jobs from the factory to engineering like the production illustration job, and the union and the union people were heavily involved in that and accepted that as the right thing to do. Production Illustration is a product that we use to install the long skinny stuff like wires, tubes and stuff like that in the airplane. Typically, it's created by manufacturing. It's like a shop aid. Engineering now does it on the 777 and it comes off the digital data set as an engineering product. So we brought the people who normally would have created that, union people, into the engineering. Now we tripped over some interesting situations where some of the people we invited to join Engineering to help do this said, "No, I can make more money with the union so I'm going to stay out of it. I'll stay with my job in the factory." They didn't fight what was happening. They simply chose not to move from operations to engineering.

Within Boeing we have two massive tongs, engineering and manufacturing, as I described earlier. We have to do it together. Manufacturing builds the product and that's where we make money. I happened to be the scribe on Friday afternoon when we got engineering and operations to agree to these ten points that for a couple of years were referred to as the Ten Commandments. In no way was it meant to be irreverent. It is just that we happened to notice later that there are ten points in there.

The first is Work Together. Now you've heard me talk about that and again. Is this motherland? No, this was our theme song. We name our first airplane Working Together. You can see it painted on the side of the bird.

Second, engineering will define systems and structures concurrently. Typically, we design the structure, then we define the systems, and then we go back and revise the structure. But, of course, the guy in the shop has already started to build the structure when we revised it, so he's got to start all over again. We said we were going to do that concurrently, we're going to define it digitally, we're going **to put it together electronically before we build it. Manufacturing is going to do sufficient planning to** make sure that they can make knowledgeable producibility decision. Engineering is going to commit to *incorporate that* producibility as long as it doesn't violate performance or safety or something like that. If it does, we'll figure out some other way to respond to the input. It worked like a charm. We had no problems.

*Manufacturing will sign the data set.* Engineering said, "Excuse me. Over my dead body. That's mine." But as we worked our way through that, we said, "Now, what manufacturing is signing is not checking on the engineering. What manufacturing is saying is that I have kinked at that data set, it is produceable, or I understand that you can't make a change for the reasons." That's all it meant. Once we worked over that it was OK. Everyone of the tens of thousands of data sets released on the airplane carried the manufacturing signature. A first for us. Maybe down the road, 10, 20, 30, 40, 50 years it won't be necessary, but for right now it's a necessary step for us. In talking to Diamond Star Motors, which builds the Mitsubishi Eclipse, the Plymouth Laser and the Eagle Talon when we visited them in early 1990, I asked the chief engineer about this idea of signing data sets. He was really puzzled and wrinkled his brow and he said, "Why? Why would I do that? Why is it necessary?" I explained that what we wanted to have happen was to make sure that manufacturing could build it. And he said, "Well I'm not done until manufacturing is happy with it." And that's what I mean. Maybe one of these days our culture will change and that won't be necessary. Right now we'll just - we do it.

Commandments, 8,9 and 10 talk about how we're going to team. Manufacturing will assign a manager to team with each chief engineer. 'This is the partner that I talked about. Now, it used to be you hardly see manufacturing in the engineering part of the company. If you went into the engineering building there wouldn't be anybody there from manufacturing. One of the first things we did was to set up to the offices so that the office of each of the chief engineers and that of his partner out of the manufacturing are right to one another. Every team was led by a design engineer and a manufacturing engineering.

There are ten disciplines that design release something that pertains to the design of the airplane. Each is teamed with a manufacturing engineering. The chief engineer responsible for designing the structure is teamed with the senior manufacturing engineer responsible for final assembly of a structure. As a team they decided on their team structure. They decided on their team leadership. They decided on which teams would start when the teams finished, and so on.

How did we train those people? Earlier I touched on program orientation. The people side of training in this program began in what we call program orientation. Five hours for everybody. Everybody who came onto the airplane program received five hours of program orientation. It was opened with an hour and one-half live presentation by one of the vice presidents that led the program. The General Manager of the Division did most of them himself, in 1990, personally. It was suggested by some folks that we just videotape him and then play the videotape. If any of you've experienced that, you know that it just isn't the same. He said "No." He made an absolutely right decision. Now, he's

got a lot of things to do, he's General Manager of the Division; nevertheless, he invested thousands of hours in 1990 leading the first hour and one-half of the program orientations in groups of about 60 to 70 people. He would dialogue with them, presenting what we called A View From The Bridge. The first hour and one-half of each orientation was presented by the GM of the Division or his VP Engineering, the VP of Operations, the VP of Finance or the Assistant General Manager of the Division.

Another thing we instilled in this program is summed up in our internal little catchphrase, "No secrets." You cannot manage a secret, it's just unmanageable. So, there are no secrets. We drug finance kicking and screaming to an openness that I've never seen at the Boeing Company before. We tried to show the design teams what it meant in the cost of the product when they changed their design. If we didn't give them the data how could we expect that they'd do a good job? Finance was not *comfortable with that*. We stretched everybody on this program we stretched ourselves, we stretched the various disciplines. The result was a strength that I have not seen before at Boeing. You'll hear this, this five hours opens with one of the Vice Presidents. When we were in Renton we were co-located in thirteen buildings. Now, that's an oxymoron. But that's what we had, thirteen buildings,. We were in the process of constructing anew design center at Everett. When it was completed we picked up 5,000 people and moved thereto Everett in the middle of the program. Our computing folks did something I'd never seen them do before. We walked out of the offices in Renton on a Friday and on a Monday walked into an office in Everett with computers operating and workstations hooked up ready to go. Now, we didn't move everybody in one weekend, we moved a few thousand each weekend over a period of about six weeks. All of these were simply mad blocks or challenges, but we overcame them, we climbed over *them*.

When we were in Renton we took the team and **showed them the sales mock-up**. We then talked about how the sales were going, and then we talked about process. This was the first blush of **what became kind of an ongoing conversation about how we were going to change their lives**. **We spent an hour and a half of the five talking about the process**. **This was for the last hour and a half of that five hours**.

**Then each discipline crafted another orientation, typically in the four-hour range, that built on the program orientation and carried that message to a lower level of detail for that discipline, whether it was finance or manufacturing or engineering or customer service**. **And if an individual was a core member of a design/build team, he went to what we called a design/build team specific orientation delivered by a chief engineer and his manufacturing engineering partner, as for example the structures design/build team**. **The chief engineer and his manufacturing partner set the stage in a one-half-day**

offsite session. We then took specific teams and held six-hour seminars, with some of my folks facilitating the seminar, where the team literally got down to nuts and bolts and began talking about, what is this going to mean, working together in a current sense? Who are my customers? How am I going to plan my work? We began to literally hammer out the front end of their work schedule. And then we simply supported them in whatever was necessary in the workshops as they had trouble down the road.

Not everybody was a core member of a design/build team. Those that weren't went to the general orientation, using exactly the same material but delivered by different people. My management, other members in the 777 team broadly speaking and I delivered the general orientation. The objective was to get everybody in the program to understand what we meant by design/build teams, because it was going to change their life.

The airplane is built all over the world. It's built at Boeing sites in several places in the United States, it's built in Japan Europe, Australia. We assemble it in Everett, Washington. Last year, the publication *The Economist* had a cover with the words on it, "Does It Matter Where You Are?" The lead article dealt with teams. What they were really excited about was electronic breakthroughs that would allow a team to be located anywhere in the world to work together. Now remember, there's 700,000 disagree with their premise, and I'll try to explain why. I think it matters dramatically where you are in a sense of teams. From a build point of view, the airplane is broken up into sections. We buy some of it Japan builds some, Boeing makes some and Boeing puts it together. Now remember, there's 700,000 parts that we're going to bring together in Everett and we want them all to fit. As to teams, does it matter where the parts are build and assembled? **Those** companies that sent their design, manufacturing and tooling people to Seattle worked in that 2S0 team structure. They went to the same team training that we went to. They're part of the team so they sat in the same training sessions and sat in the same seminars. When their design package was complete not done but complete enough that interfaces were completely defined so that we understood how it would fit with the other parts of the airplane, they picked it up and took home. Now, once we had worked with them eyeball to eyeball, for a year or two, then it matters less where you are. *The Economist* is wrong it really matters, at least in my judgment, on a product this complex. It really matters. We had to have eyeball time, eyeball to eyeball, across the design table, because we're working on cultures. There's a culture difference even between Seattle and Wichita. These are two pieces of the Boeing Company in Wichita and Seattle. The badges say B-O-E-I-N-G. But they're different cultures. Once we learn to work together it matters a little less, in my view, where you are, but it still matters. We used video conference, we used

telephones, we used fax and trips. If we had a really hard nut to crack we would either send a team to Japan or bring a team from Australia to Seattle to work on the hard nut. We never figured out a way to get around that. Accordingly, I think as to teams, once you've got to enough eyeball time, you can go a long ways in doing it remotely through the marvels of electronics. When you're really wrestling something tough, I want to sit across the table.

What I'd like to do now, if I could is show you a couple of results and then show you a brief video clip. Just briefly, I'd like to describe a three-dimensional design tool we used which is, principally, a communication tool for us. Once the Japanese went home, for instance, and we're assembling the airplane electronically in Seattle-that is, we're putting it together to make sure it fits, that all the part go together. Part of the airplane fuselage was designed in Japan so we put in place a system whereby if a designer in Japan submitted his three-dimensional model electronically from his office, an hour later it was visible to a designer in Seattle. Now, we did that by leasing a fiberoptic ocean cable that had a provisional satellite backup in case some fisherman dropped a cable and broke it. It was a communication tool. We thought about the design in three dimensions, whether it's putting the tool up against the part or putting parts together. It was a three dimensional dialogue. How did it work? Some of the most skeptical people became my very good friends, the people from the factory. If the bird doesn't go together, typically, the people that take the heat are the operations folks. Remember the date, May 15, six years ago was picked as the day we'd deliver the first airplane to United. Six years ago we didn't even know what this airplane would look like. But we committed ourselves, that on the 15th of May, 1995, we hand over the key to the first airplane to United. But I'm astounded that the date of that event was picked six years earlier. If the airplane didn't roll out on the 9th of April 1994, as planned the guy that was gonna really take the heat was the vice president of Manufacturing. So what we had to do was engage the team, and it really was a march of faith that we were going to do this. The VP of Manufacturing and some of his folks said they believed, but they weren't really sure. You know, engineering made a lot of promises to manufacturing years and sometimes we didn't make it. The guys that got the short end of the stick was manufacturing. So they said, "We're not going to take all of the pad out on the manufacturing side." We have something called Pudget Sound flow and that's kind of an opening shot to plan something. How long does it take? Well Bang will tell you. But we said, it's going to go together better. It's going to take this long. You're not going to have to do it six times; it's going to take this long. We got some compression but not nearly as much as the potential is there, but we got some. When the bird started going together, one of the supervisors in the shop, whose team is responsible for stuffing and procloding the long skinny stuff together, offered this unsolicited

comment that appeared in the Boeing News: "What we're finding out right now is that the wire bundles, the blankets and tubes are fitting phenomenally well. We're really pleased with the fit-up of all those parts." I couldn't believe it. That supervisor believes. It really went together. It really worked. We had never built an airplane that fits so well and went together so well as this one.

And here's what it was. It's taking a Vision adding people, adding tools and training. We think we have set a new standard not only for the industry but for ourselves. But the most difficult piece of it wasn't technical. It was teaching creatures like you and me to live differently. It was making it comfortable to climb out of what I characterize as a velvet-lined rug that we all live and and carve a new way of doing business. It's threatening. It's not easy to do and, fortunately, we were able to engage the thousands of folks that it took to design and build this airplane. They did that they stretched themselves, they went off and learned how to do it a new way. Not perfectly, don't misunderstand me. It was the first time we ever tried this. In many ways, it far exceeded what we had a right to expect

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