



The GOOD Book:



**a collection of Ergonomic Successes
at Naval Air Depot Jacksonville, Florida**

*Barbara L. Wright
NAVAIR National
Ergonomics Program Manager*

In the beginning . . .



. . .there was little light!

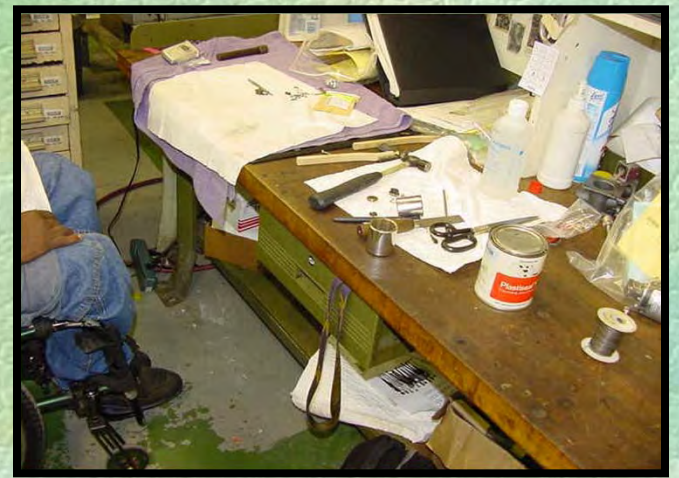
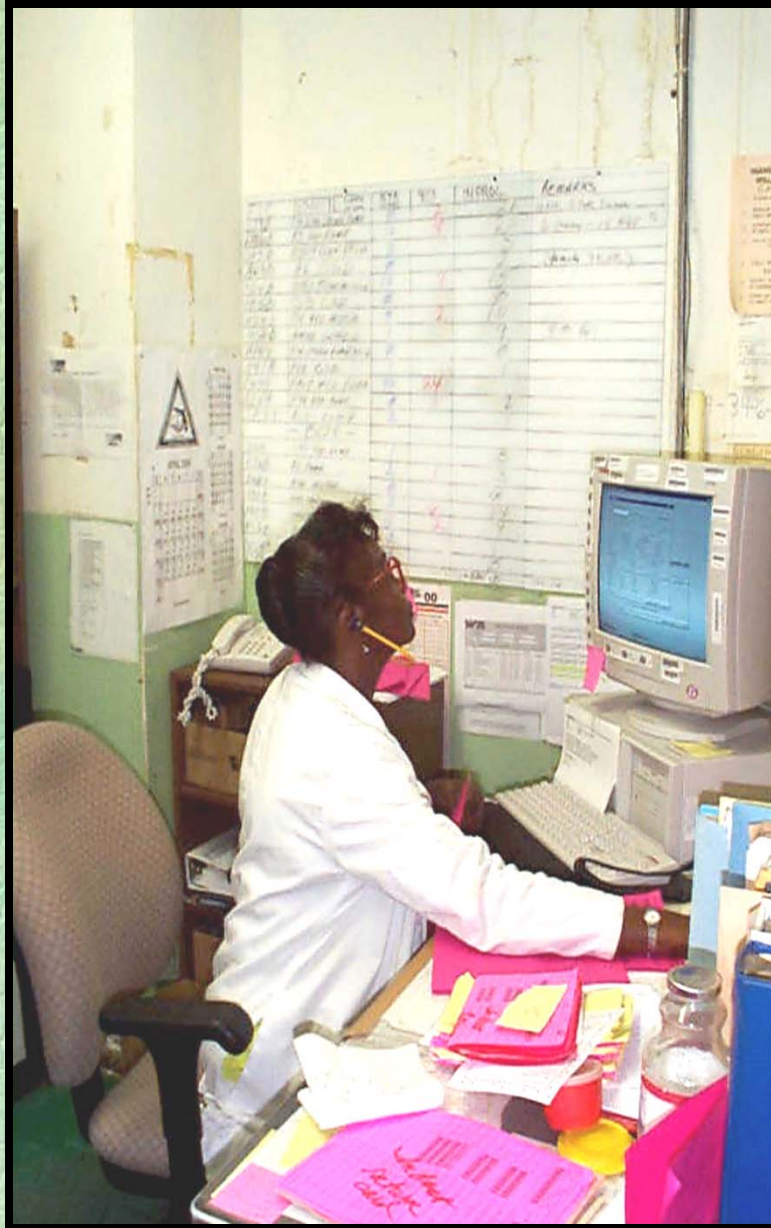
We were doing things

**Pretty much the same way we'd done them
for the past 40 years -**

- and proud of it!



Sitting . . .



Staging and Storing . . .



. . . twisted postures



**and awkward
reaches . . .**

**. . . the same way -
or little better.**



Work was WORK (by golly!) . . .



. . . and “comfort” was a
four-letter word



“PRODUCTION”
was the name
of the game!

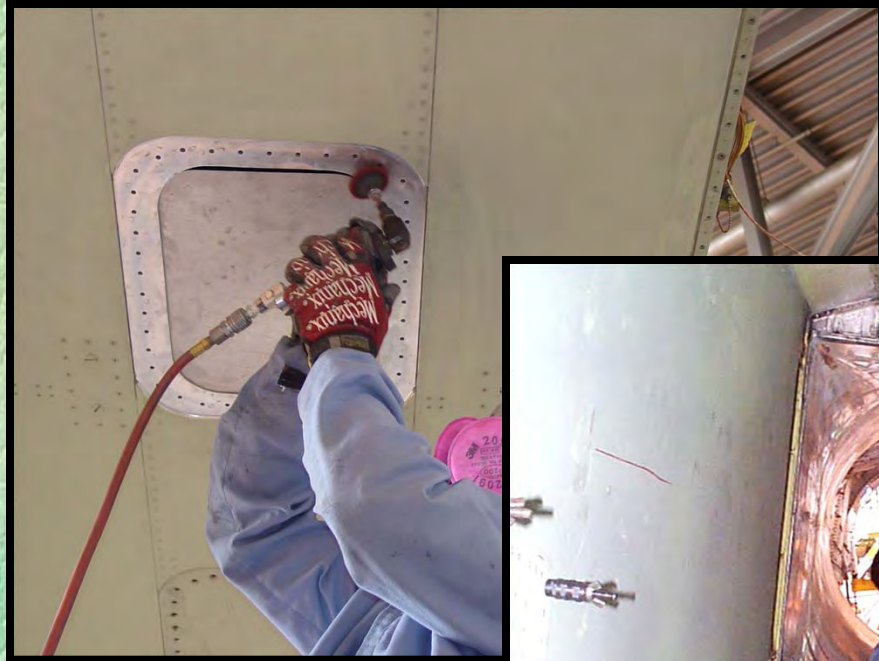
NO PAIN – NO GAIN!

“Work harder, not smarter”



Tug! Shove!
Heave!

Reach!



Reach up!



Reach through!



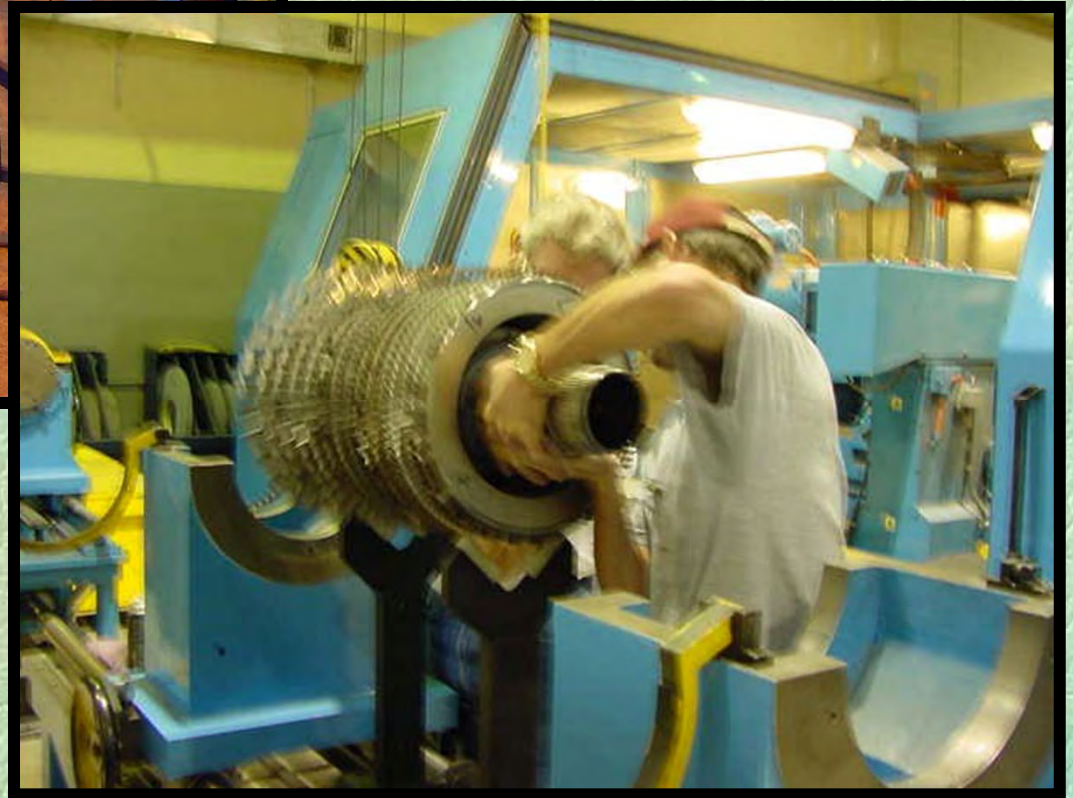
Reach out!

Hang in there!

**. . . and don't expect
any credit –**

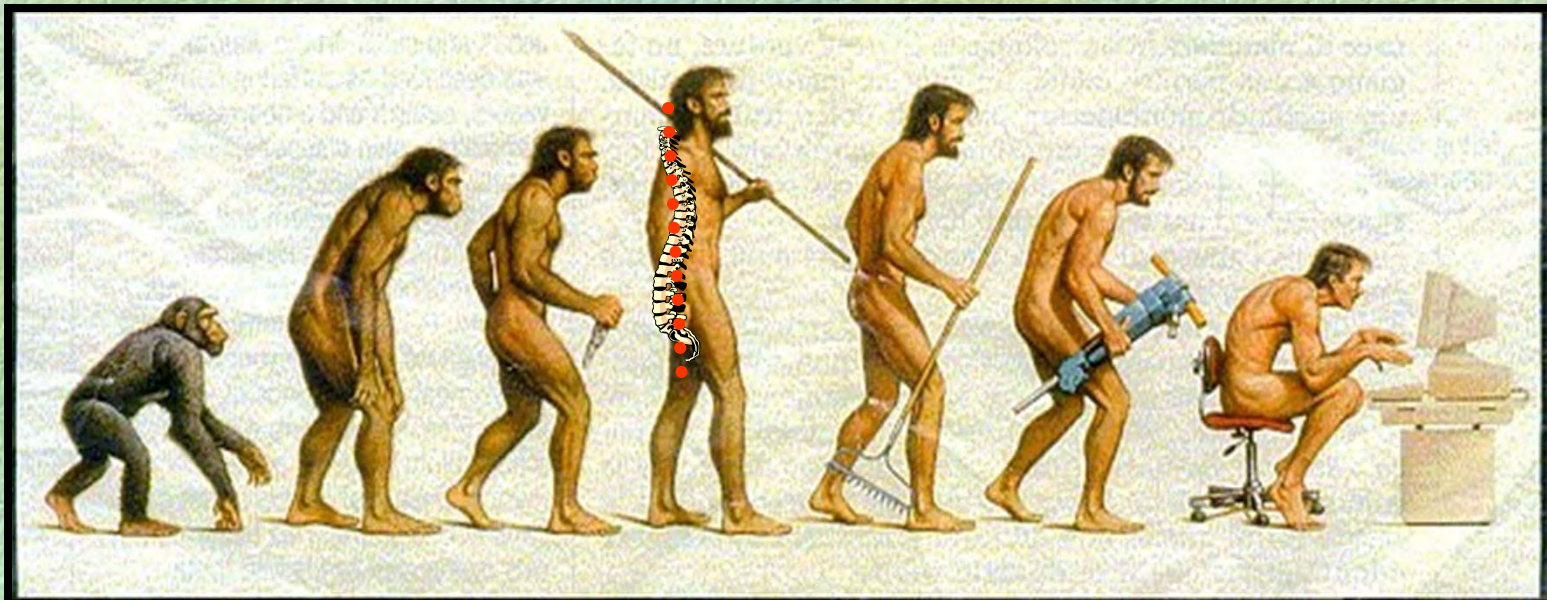
**It's your JOB
(gosh darn it) . . .**





... and you're lucky to *have* one!

New Technology and the work pace increased . . .

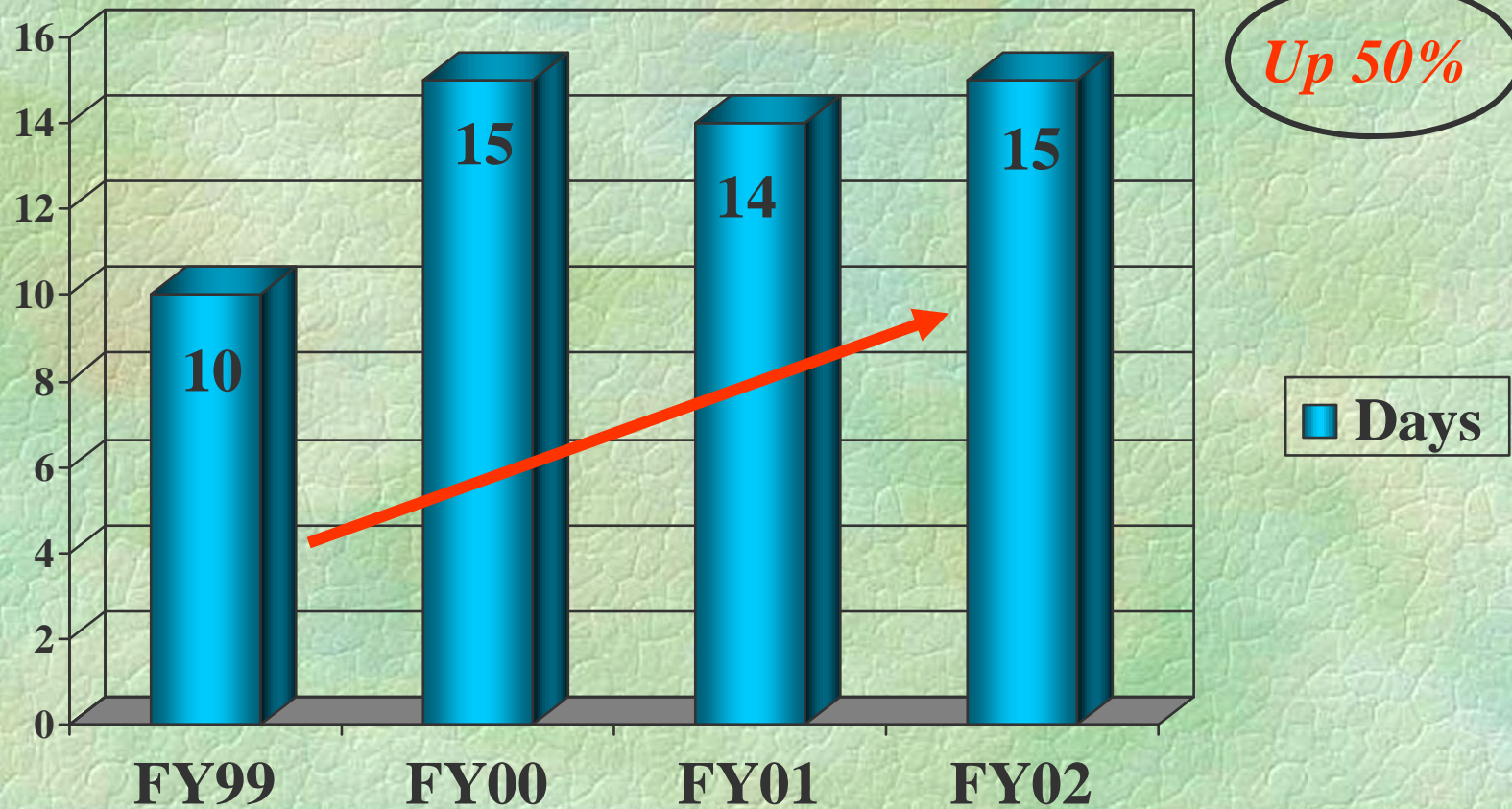


Somewhere, something went terribly wrong

. . . even faster than the age of our workers!

Work-related injuries were increasing

Workdays Lost/Per 100 Workers

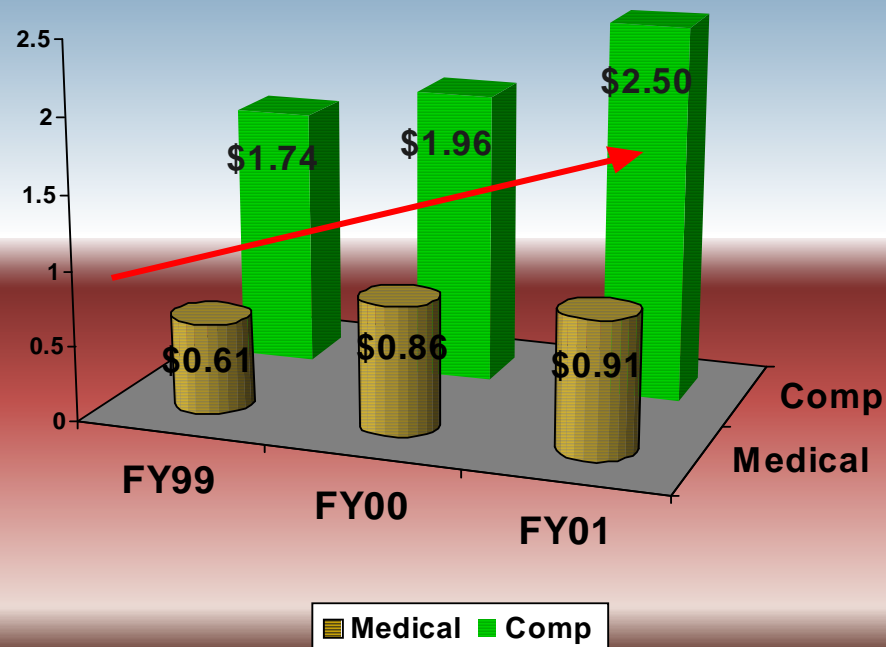


Compensation, medical and administrative costs increased

NADEP JAX FECA (Worker Comp) Chargeback:



Medical/Comp Costs in \$Millions

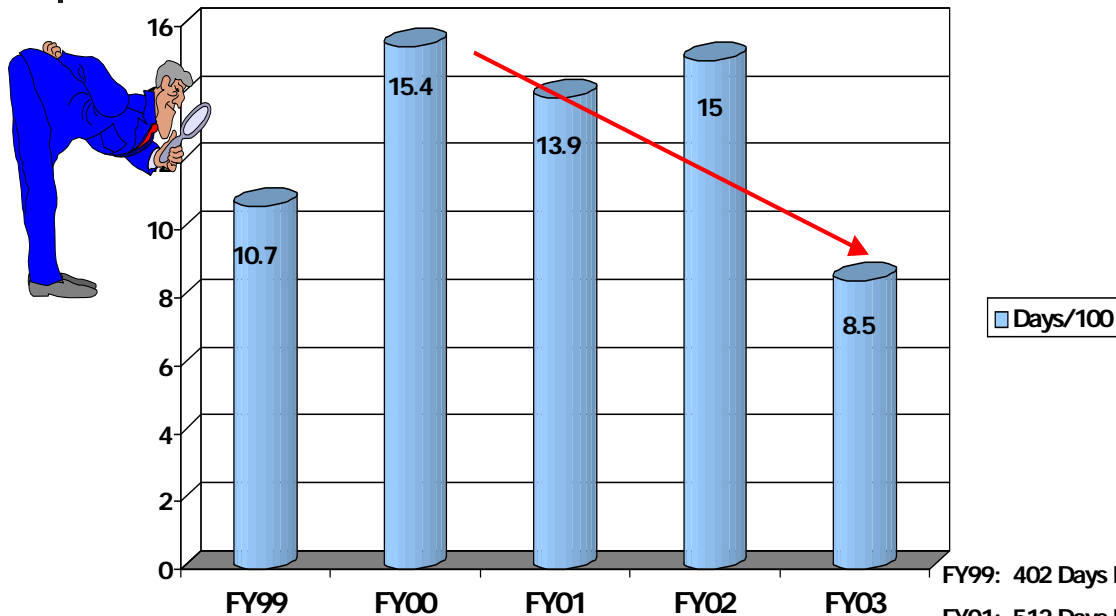


... and so came **STATISTICS**
and managers saw that numbers were good!

NADEP JAX

Lost Workday Rates (LWR)

(Actual Workdays Lost per 100 Workers)



Workdays Lost per 100 Workers

FY99: 402 Days Lost

FY01: 512 Days Lost

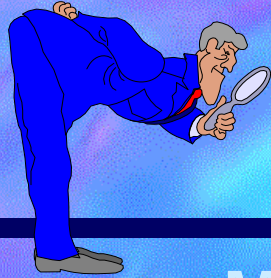
FY02: 607 Days Lost

FY03: 274 Days Lost

6.

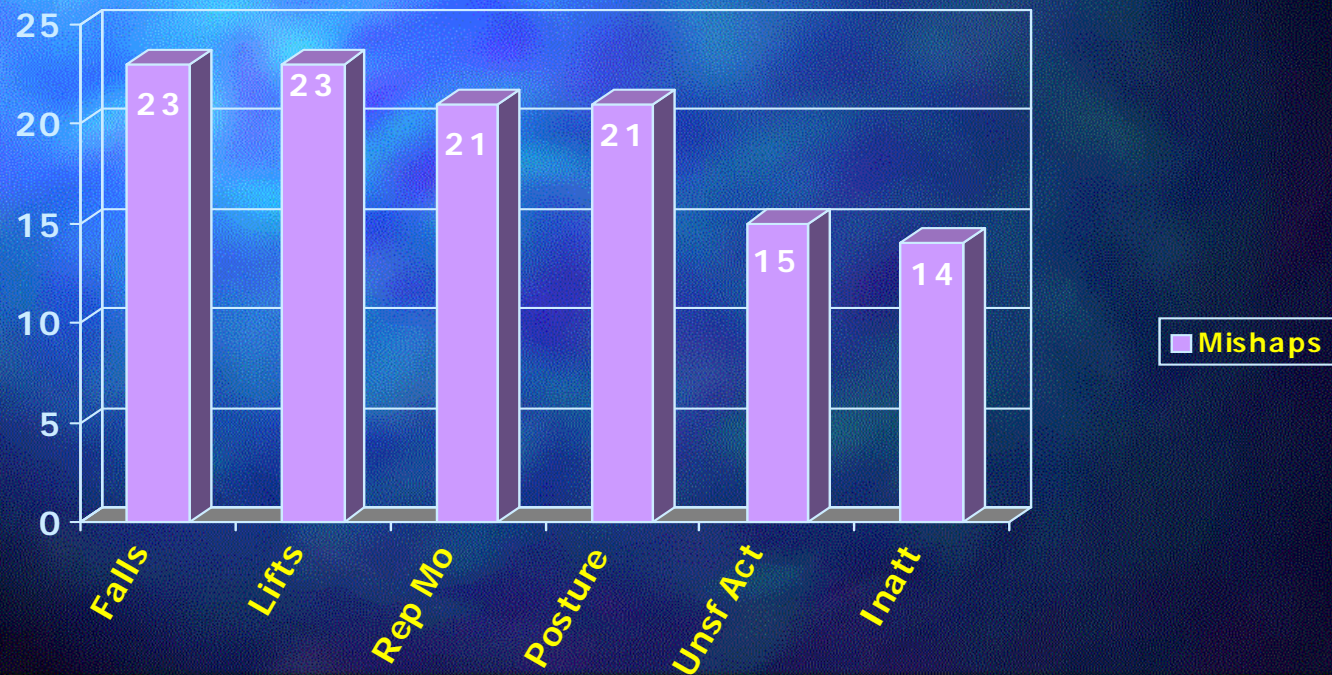
- They highlighted the “black holes”
- They pointed out the smooth spots that needed no attention, and

They helped focus limited resources



*Checking back. . .
FY01 Mishaps Focus on:*

Most frequent mishap types



**... and OSHA noticed the numbers. . .
and rulers made laws to fit work sites to workers.**



- **OSHA Ergonomics Guidance to Industries**
- **OPNAV Instruction on Ergonomics (Navy Policy)**
- **NADEP Jacksonville Ergonomics Instruction (“Something for us to hang our hats on!”)**

– **NADEP Supervisors**

At NADEP Jacksonville
We don't let KIDS play with the aircraft!



Our workforce matured as it increased in age at the same time work *pace* increased. Few of us were content now just to be told what to do (and be efficient about it) we wanted to know **WHY?**

We wanted to be *a part of* the decisions – we wanted to make our own smart decisions! We had our own valuable ideas . . .

So we looked to managers for



And so . . .

the **ERGO ERA**

came to be!



We taught our workers the “secrets of ancient wisdom”

Ancient Wisdom for Modern Workers

mply:



Get in line.
(Work in neutral”)



Keep moving!
(Promote circulation”)



Strike a balance!
(Equal and opposite)

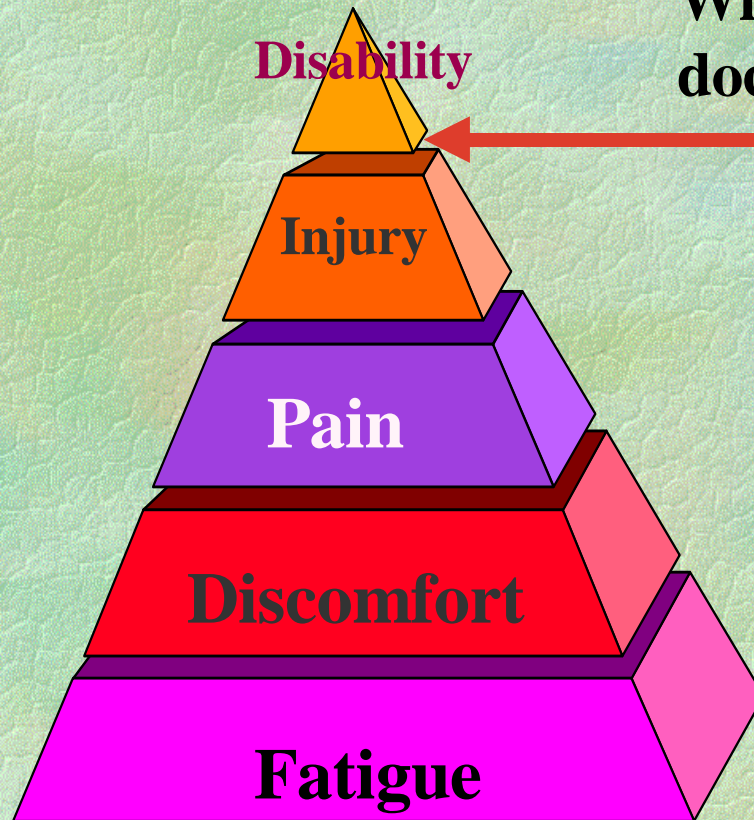


Think: “Ergonomics”

**Recognize
Remedy**

We taught workers to recognize ergonomic challenges and their role in change

Personal Responsibility & Simple Self-Care



**Where does the supervisor,
doctor or safety come in?**

After the injury!

Before then,

***Only you have the
knowledge.***

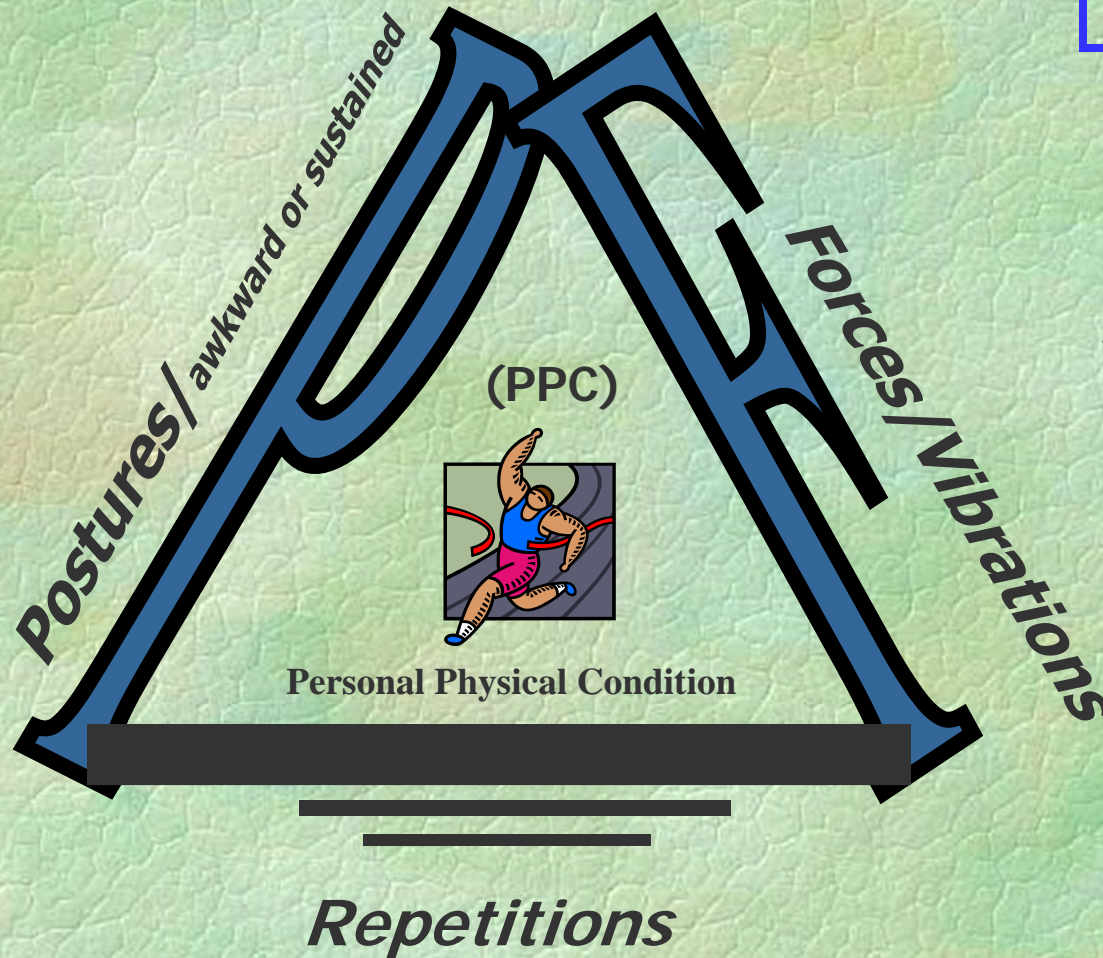
***You have the responsibility
for awareness and self-care!***

We taught them how to protect themselves – Simply!

Strain Triangle

Every MSD begins with at least one of these.

Just like the Fire Triangle: Control any ONE element – risk is greatly reduced!

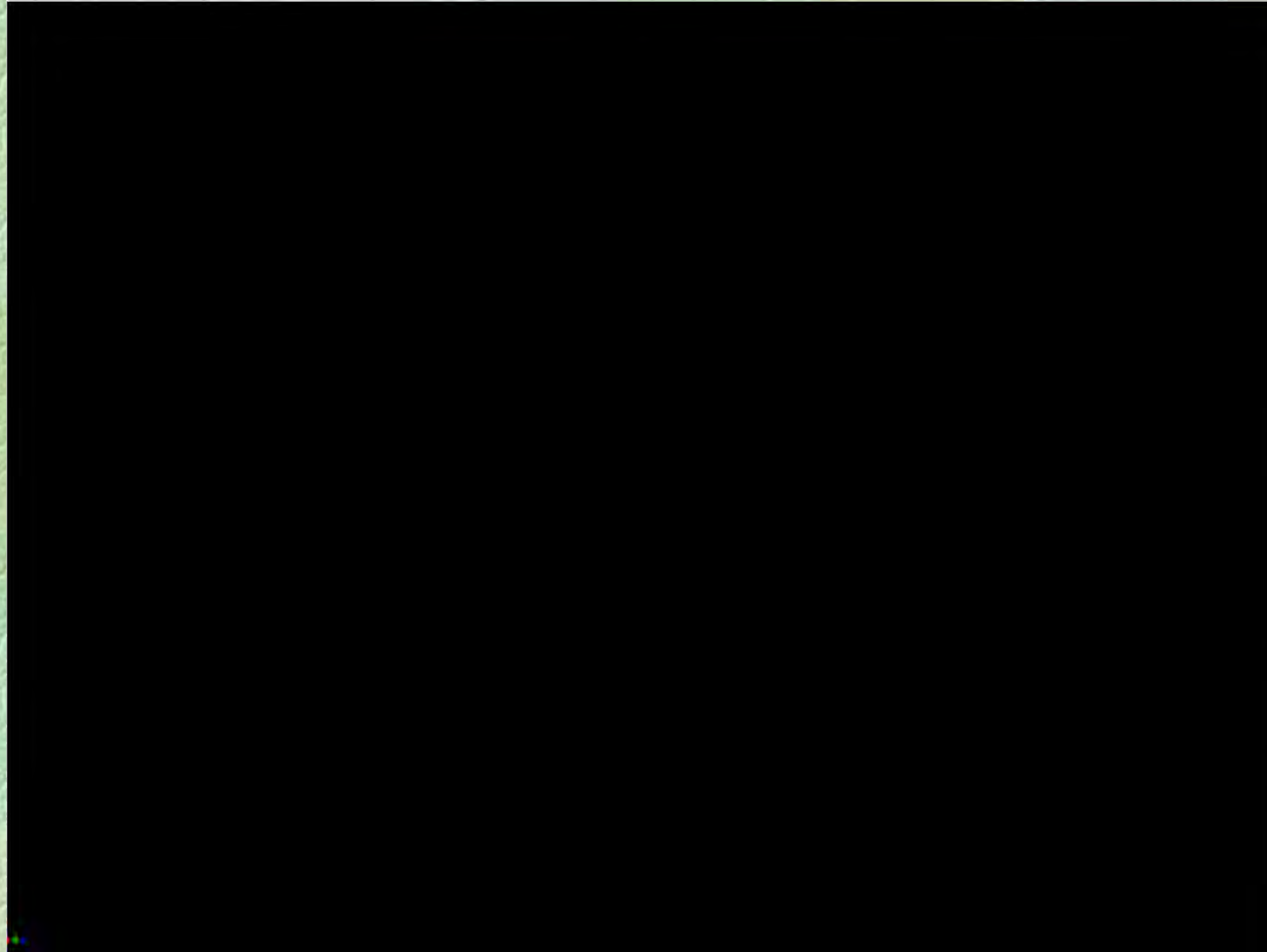


(NADEP JAX Secret Symbol for Ergonomics)

We listened to them to protect others . . .



We gave them a system to effect change before injuries happened



NADEP Jacksonville Ergonomics Process

The Ergo Era emerged



- We gave them mechanical and technological assistance
- We provided better ways to reach the job . . .
- And smarter ways to DO the job

We focused first on Back Injuries (Tracked and measured improvement)

In FY01 back injuries were down 18% from FY00, and the days lost to back injuries were down 29%. Was it a fluke? Or might we see Ergonomics pay off every year?

	<u>FY00</u>	<u>FY01</u>	<u>FY03</u>	
Back Inj	28	23	36	Up 29%*
Back Inj w/zero loss	18	14	28	Up 56%
Lost Day Cases	10	9	8	Down 20%
Days lost to backs	132	99	42	Down 68%

But, did we know any more about
WHY they were happening?

Using our Secret Symbol, we narrowed down the Causes of Lost Workday back injuries:

	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	<u>Outcome:</u>
<u>Force</u>				
<u>Overexertion</u>	10	7	3	Down to less than 1/3
<i>Days lost lifting</i>	60	29	13	<i>Down to less than 1/4</i>
<u>Postures</u>	9	7	3	Down to 1/3
<i>Days lost</i>	57	2	10	<i>Down to 1/6</i>
<u>Falls</u>	5	4	1	Down to 1/5
<i>Days lost fm falls</i>	9	52	13	<i>Up 44%</i>
<u>Personal (PPC)</u>	0	0	1	5 days lost in FY03

Twenty-eight (78%) of the 36 back injuries reported in FY03 did not require lost workdays. **We encourage early reporting so that intervention takes place *before* injury occurs! IT WORKS!**

And so, the Ergo Era reduced injuries

- **Back injuries were no longer most frequent nor most costly injuries**
- **Days Lost to Strains reduced**
- **Discomfort was reported early, so intervention was possible before injury**

Managers noticed the savings and they saw that savings were “good.”

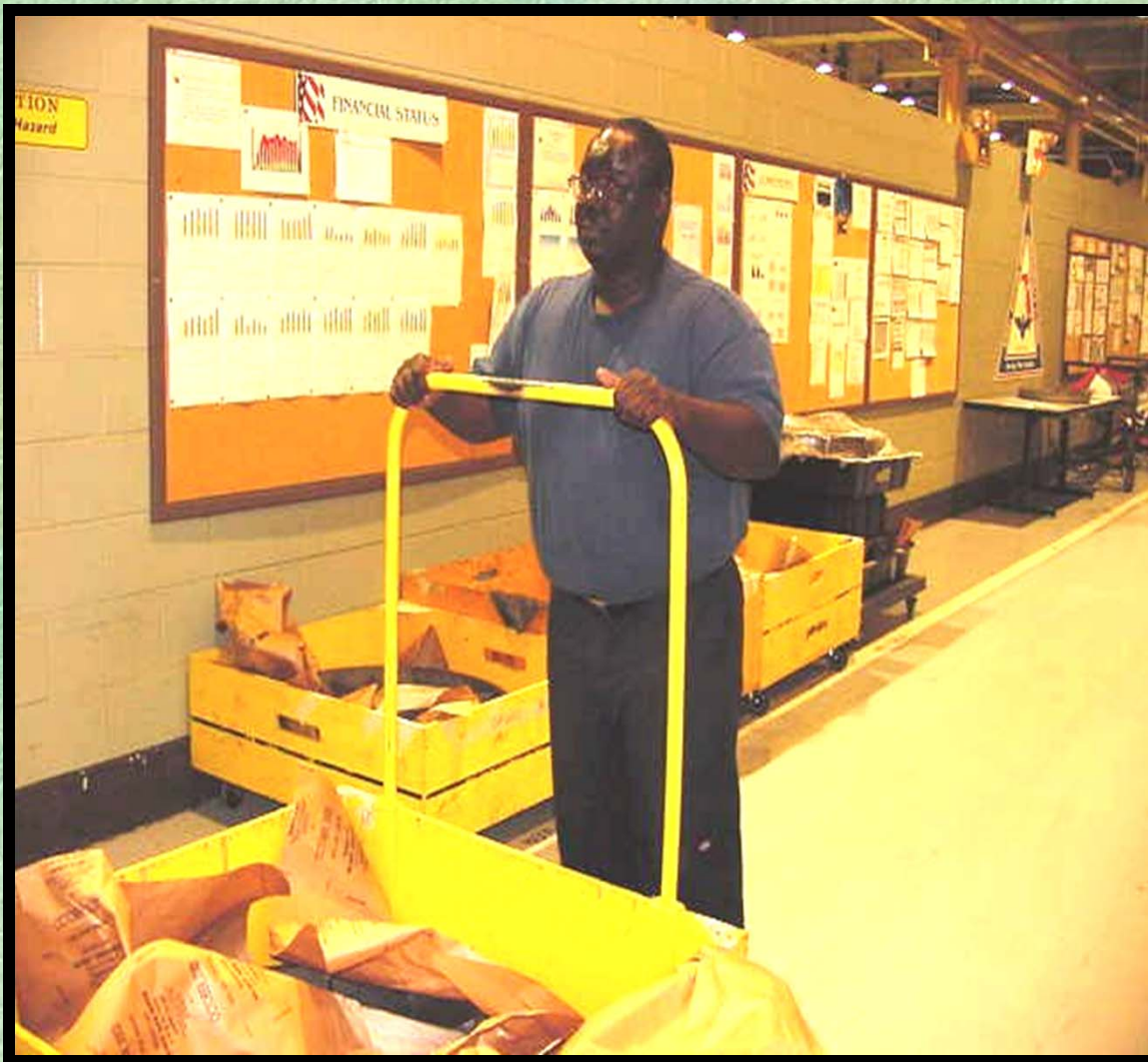
- **Once runaway Comp Costs held in check**
- **Productivity Impact reduced**
- **Personnel Protected**

**and Managers noticed the productivity
(They KNEW productivity was a good thing!)**



- **Foldaway Carts**
- **EIDOS Positioner**
- **Sit Stand Rester**
- **Super Chair**
- **Robotics**
- **Shop Seating**
- **Adj Lift Carts**

The simplest things were “simply wonderful” if they reduced aches and pain



- Surface Mats
- Adjust Stools
- Impact gloves
- Wheels
- Cradles
- Blade Covers
- Handles

It wasn't just Industrial workers who benefited . . .



What do you work safely for?



Managers wisely invested in Ergonomics

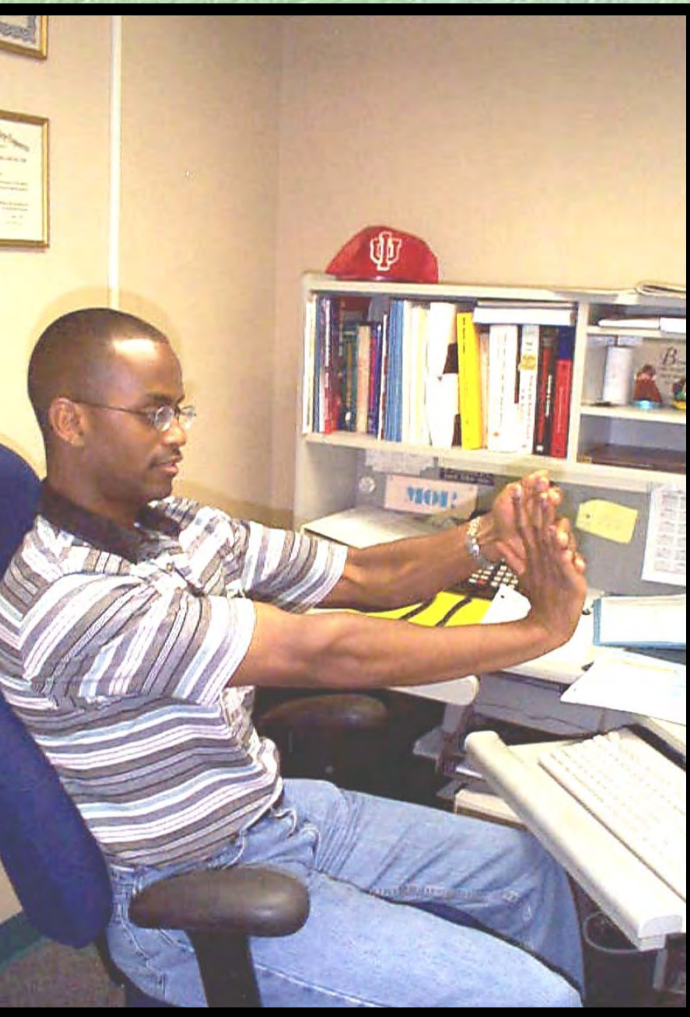


- **TEAM**
 - Meetings
 - Projects
 - Training

- **TIME**
 - Job Number

- **FUND**
 - Materials
 - Manpower

and so Ergonomics flourished - and grew, and became refined



- **Web**
 - **Information**
 - **Communication**

- **Matched Funds**
- **Recycling**
 - **Adjustable**
 - **Durable**
 - **Relocatable**

- **Training***
 - **Process Engineers**
 - **Supervisors**
 - **LEAN**

. . . and we exported lessons-learned
throughout DoD and Private Industry –



SECNAV Awards in 4 years

Admiral Vern Clark Award



and others saw that Ergo was “COOD!”

THE
END

???

WE CERTAINLY HOPE NOT!



**Even when the planet is overtaken
by computers and robots –
There will ALWAYS be room for
Ergonomics**

AND
THAT'S GOOD!



Barbara.l.wright@navy.mil