

POSTITIVE TOOL CONTROL SYSTEM

INTERACTIVE LEARNING SESSION

BEST SHOP PRACTICES

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NAFPI'S PLEDGE

PARTNERS IN F.O.D. PREVENTION

A QUALITY DECISION

LONG BEACH, CA

8-9-99



CONTROL

TOOL CONTROL

POSITIVE TOOL CONTROL

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TOOL CONTROL

CONTROL



OVERVIEW

AGENDA
POSITIVE TOOL CONTROL SYSTEM...SYSTEM ELEMENTS...
DISCUSSION

SYSTEM & PROCEDURES	INFORMATION EXCHANGE...STARTUP... IMPLEMENTATION..SUSTAINING...
EDUCATION-AWARENESS	OBJECTIVES...FOD POSITIVE TOOL CONTROL SOMETHING FOR EVERYONE
SYSTEM ELEMENTS	DECISION FOR TYPES OF TOOL CONTROL
TOOLS	IDENTIFY REQUIRED TOOLS... GROWTH, REVISIONS TEAM MEEETING
TOOL STORAGE	DEFINE STORAGE... INDIVIDUAL OR GROUP CABINETS CRIB...REMOTE DISPENSING... GROWTH/REVISIONS-USER FRIENDLY...ERGONOMIC
TOOL CONTROL	DEFINE CONTROL REQUIREMENTS
TOOL BOX DRAWER LINERS	DEVELOP EFFECTIVE LAYOUTS... SPACE UTILIZATION EGONOMIC...DEFINE COLOR... GROWTH ALLOWANCE
DISPLAY BOARDS	DEVELOP EFFECTIVE LAYOUTS VISIBILITY
PORTABLE KITS... TOTES	IDENTIFY TASK...REQUIRED TOOLS DEVELOP LAYOUTS



AGENDA CONTINUED...

SYSTEM IDENTIFICATION

**KIT PART NUMBERS...
DESCRIPTION**

PART NUMBERS IN THE POCKET...

BAR CODING

LASER ETCHING

CHITS

INVENTORY CONTROL

MANAGEMENT CONTROL SPECIFICATIONS...

FOD AUDITS

CTK NUMBERS...DRAWER NUMBERS...
TOOL NUMBERS

WHAT TOOL GOES IN A POCKET

CLOSED LOOP...CTK...BILL OF MATERIALS
TOOLS-LABELING

PART NUMBER...CUSTOMER PART NUMBERS

MISSING IN ACTION.. WHO HAS IT ?

WHAT DO WE HAVE ?.. HOW MANY ?...
WHERE IS IT ?



CONTINUOUS IMPROVEMENTS USER FRIENDLY

LESSONS LEARNED

COMMUNICATION

NOTE CARDS

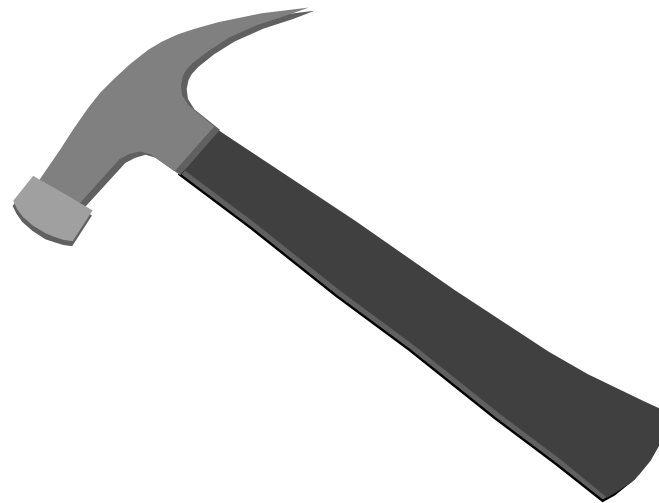
QUESTIONS

RECOMMENDATIONS

BEST PRACTICE

ASSISTANCE

LITERATURE/OVERVIEW BOOKLET



INTRODUCTION



National Aerospace **FOD** Prevention, Inc. is a nonprofit, educational undertaking. The purpose of the organization is to provide the aerospace industry with information about the prevention of foreign object damage to aircraft and aerospace vehicles. The intent is to make the aerospace industry aware of the need to eliminate foreign debris, and to provide information about current proven practices and technological advancements that prevent FOD.

Valuable “lessons learned” are shared so that the industry can become more effective in their individual FOD prevention programs. It is anticipated that as the industry accepts and implements these recommendations. Quality and product integrity will improve, thereby increasing productivity and reducing avoidable cost. Your program must be individually based on company philosophies, contract requirements and policies.

***OUR COMPANY SUPPORTS FOD PROGRAMS...WE WILL
ANSWER QUESTIONS...OFFER ASSISTANCE
1-800-388-8916***



POSITIVE TOOL CONTROL TOOL ACCOUNTABILITY

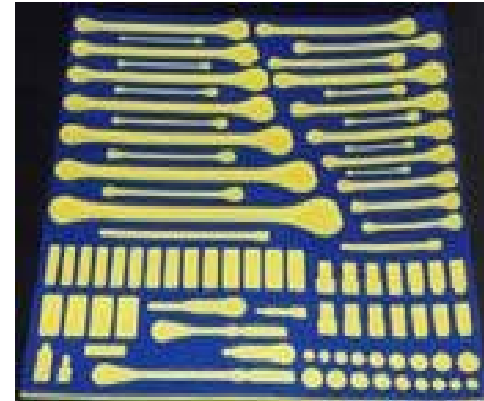
THE PRIMARY OBJECTIVE OF A POSITIVE TOOL CONTROL PROGRAM IS TO ELIMINATE FOD ACCIDENTS, LOSS OF LIFE, OR DAMAGE TO EQUIPMENT DUE TO TOOL FOD.

THE FOCUS CAN BE SIMPLY STATED AS:

**A PLACE FOR EVERY TOOL
EVERY TOOL IN ITS PLACE**

IF IT ISN'T IN ITS PLACE

**WHAT'S MISSING.....?
WHERE WAS IT USED.....?
WHO HAS IT.....?**



EDUCATION- AWARENESS

TOOL CONTROL IS AN IMPORTANT MANAGEMENT RESOURCE THAT ADDRESSES THE ISSUES OF SAFETY, PRODUCTIVITY AND ASSET MANAGEMENT- ALL IN A SINGLE PROGRAM. TOOL CONTROL IS IDEALLY SUITED TO MANY APPLICATIONS THROUGHOUT THE MILITARY, AEROSPACE AND INDUSTRIAL SECTORS, AND IS A MAJOR SUB-SYSTEM OF **FOD** PREVENTION PROGRAMS.

TOOL CONTROL IS ONE ELEMENT IN A COMPLETE **FOD** PREVENTION PROGRAM. TOOL CONTROL HAS BEEN SPECIFICALLY DESIGNED TO BE USED HAND-IN GLOVE WITH **FOD** PREVENTION SYSTEMS, PROCEDURES, AND PROGRAM MANAGEMENT.

A GOOD **FOD** PREVENTION PROGRAM IS BUILT AROUND MANAGEMENT COMMITMENT AND COMMUNICATION WITHIN THE PROGRAM TEAM. DEVELOPING AN EFFECTIVE TOOL CONTROL SYSTEM IS HARD WORK THAT REQUIRES A SYSTEM FOR PLANNING & REVIEWING DETAILS THAT INVOLVE THE USERS OF TOOL CONTROL. THE ROLE OF USERS IS CRITICAL, DUE TO THE UNIQUE TOOLS REQUIRED TO PERFORM SPECIFIC TASKS AND THE NEED FOR INDIVIDUAL CUSTOMIZATION TO ACCOMMODATE THEM

*THE FOLLOWING GUIDELINES COVER AREAS WHICH SHOULD BE CONSIDERED
WHEN DEVELOPING CUSTOMIZED DESIGNS FOR TOOL CONTROL*



REAL WORLD

THERE IS A REAL PRESSURE

SITUATIONS:

REAL FOD PROBLEMS

RUSH

EMERGENCY

BEHIND SCHEDULE

OVER-COMMIT

PEOPLE JUST FORGET

WAITING EXPENSIVE

SO LETS MAKE IT EASY!

WE'RE BACKED UP

CHANGE THOSE ARMAMENTS

WINDOW IS CLOSING

SHIFT IS CHANGING

GET THE BIRD IN THE AIR

WE'RE BURNING FUEL

LOSING OUR POSITION



EDUCATION-AWARENESS

SOMETHING FOR EVERYONE

MANAGEMENT

A SYSTEM ...COMMUNICATION/INTERACTIVE...
ACCOUNTABILITY -RESPONSIBILITY -CONTROL

C3

COMMUNICATIONS -COMMAND -CONTROL

SAFETY

PEOPLE-AIRCRAFT

OPERATIONS

PRODUCTIVITY-ELIMINATES LOOKING FOR TOOLS (LOST TIME)
DAMAGE CAUSED BY USING THE WRONG TOOL
TRAINING-COMPLIMENTS ORIENTATION

ENGINEERING

PROCESS CONTROL...RIGHT TOOL FOR THE TASK...ELIMINATES TOOL
CAUSED DAMAGE

TECHNICAL SERVICES

REMOTE CONTROL-WHAT DID I BRING?-DID I RETURN IT?

INVENTORY CONTROL

WHAT DO WE HAVE?-WHAT DO WE NEED?-WHERE IS IT?
DO WE HAVE TOO MANY? -TOO FEW?

FINANCE

ASSET MANAGEMENT-TOOLS ARE EXPENSIVE-ACCOUNTABILITY-
DUPLICATE PURCHASES-LOST TOOLS-COST OF DAMAGE



SYSTEM & PROCEDURES INFORMATION EXCHANGE

START UP

- MANAGEMENT COMMITMENT....FUNDING
- ORGANIZATION...FOD COORDINATORS, FACILITATORS, TEAMS
- SPECIFICATIONS...POLICY... CONTROL...
- AWARENESS...INTERNAL SELLING...TRAINING BENEFITS

IMPLEMENTATION

- TEAM MEETINGS
- TIME PHASED PLAN... GROUP STORAGE...CRIBS...INDIVIDUAL STORAGE
...PORTABLE KITS **AREAS**-FINAL ASSEMBLY-POWERPLANT-AVIONICS-
HYDRAULICS ELECTRONICS...
NUMBERING SYSTEM...DESCRIPTION

SUSTAINING

- REVISIONS NEW TOOLS
REPLACEMENT OR NEW COMPLETE DRAWERS
OBSOLETE TOOLS
- AUDITING WHAT'S HAPPENING...MODIFICATIONS



EDUCATION AWARENESS

EXAMPLE:

CTK-DESCRIPTION	TOP LEVEL NUMBERS	DRAWER NUMBER
C17 AFT HYDRAULIC CTK	C17AHY	C17AHY 1-2-3-4
GENERAL MECHANIC'S KIT	GM1	GM-1-2-3-4-5-6-7
AVIONICS KIT	AV1	AV-1-2-3-4-5-6-7
ELECTRONICS KIT	E 1	E 1-2-3-4-5-6-7

ALL RESIDUAL TOOLS USED IN A TASK AREA SHOULD BE INCLUDED IN ANY TOOL CONTROL SYSTEM. INTERMITTENTLY USED OR PERSONAL TOOLS SHOULD NOT BE ALLOWED IN THE TASK AREA. NECESSARY INTERMITTENTLY USED TOOLS SHOULD BE STORED AT A REMOTE SITE AND BE POSITIVELY LOGGED BY THE TOOL CONTROL FACILITATOR (OR THE TASK SUPERVISOR) WHENEVER BROUGHT INTO THE TASK AREA-AND POSITIVELY LOGGED OUT AND RETURNED TO THE REMOTE SITE WHEN USAGE IS COMPLETED.



SYSTEM ELEMENTS

THERE ARE NUMEROUS TECHNIQUES AVAILABLE TO FACILITATE TOOL ACCOUNTABILITY

THE USE OF:

TOOL SILHOUETTED CONTROL BOARDS

- INDIVIDUAL AND GROUP STORAGE SYSTEMS WHERE EACH TOOL HAS A CUSTOM POCKET...REMOTE DISPENSING
- CUSTOM TOOL KITS FOR TASK SPECIFIC OPERATIONS-CTK'S
- PORTABLE TOOL KITS FOR TASK SPECIFIC OPERATIONS-GMTK
- PORTABLE TOOL KIT SPECIAL CANVAS OR VINYL ORGANIZERS UTILIZING PRINTED POCKETS WITH SPECIFIC TOOL POCKETS...FOD TOOL BAGS
- SOFTWARE-CRIB MANAGER
- PART NUMBERS IN POCKETS
- LASER ETCHING
- BAR CODING SYSTEM
- CHIT SYSTEMS



SYSTEM ELEMENTS

POSITIVE TOOL CONTROL

PART NUMBER CONTROL

IN THE POCKET
ON THE TOOL CONTROL INSERT-CONTROL BOARD
BAR CODE SYSTEM
LASER ETCHING
LAMINATED / BILL OF MATERIAL

CHITS-TOOLS

- *SLITS IN THE POCKET
- *CHIT CONTROL BOARD

PHOTO I.D.
NUMBERED TAG
IMPRESS-NAME TAG
BAR CODE SCAN

BAR CODE SCAN

BAR CODED TOOL POCKETS
BAR CODED TOOLS
BAR CODED BILLS OF MATERIAL
BAR CODED EMPLOYEE IDENTIFICATION

SOFTWARE SYTEMS

CRIB MANAGER...INVENTORY CONTROL



A PLACE FOR EVERY TOOL
EVERY TOOL IN ITS PLACE

IF IT ISN'T IN ITS PLACE

WHAT'S MISSING.....?
WHERE WAS IT USED.....?
WHO HAS IT.....?



DEFINE TOOL CONTROL REQUIREMENTS

INSTRUCTIONS

*THE FOLLOWING GUIDELINES COVER AREAS WHICH SHOULD BE CONSIDERED
WHEN DEVELOPING CUSTOMIZED DESIGNS FOR TOOL CONTROL*

LET THESE SIMPLE SUGGESTIONS

GUIDE YOU TO SUCCESS

- **STEP 1 .** PLANNING/ ORGANIZATION
- **STEP 2 .** IDENTIFY ALL TOOLS (INCLUDING INTERMITTENTLY USED)
- **STEP 3 .** DETERMINE THE SIZE OF TOOL STORAGE UNIT
- **STEP 4 .** ASSIGN TOOL TO A SPECIFIC DRAWER
- **STEP 5 .** DEVELOP STORAGE UNIT NUMBERING/DESCRIPTION
- **STEP 6 .** ALWAYS CONSIDER THE DRAWER HEIGHT.
- **STEP 7 .** LIST TOOLS BY NUMBERING DRAWER.
- **STEP 8 .** LAY TOOLS OUT-CONFIRM DRAWER FIT
- **STEP 9 .** RESERVE SPACE FOR FUTURE ADDITIONS & CHANGES
- **STEP 10 .** AUDIT MISSING TOOLS & OVERLOOKED REQUIREMENTS



LESSONS LEARNED

“POSITIVE” TOOL CONTROL

EXCLUSIVE CUSTOM TOOL DRAWER ORGANIZERS CAN GIVE YOU “POSITIVE” TOOL CONTROL WHEN USED JOINTLY WITH BAR CODING, LASER ETCHING, CONTROL CHITS, OR MECHANICS’, PICTURE I.D. TAGS.

THE BENEFITS OF PROPER PLANNING

MANY OPTIONS MAY BE SELECTED AND MANY VARIATIONS MAY BE DEVELOPED TO BETTER SUIT YOUR INDIVIDUAL NEEDS. DEEP DRAWERS CAN HAVE LAYERED INSERTS TO BETTER UTILIZE THE FULL DRAWER DEPTH. SIDE-CUT HAND HOLDS WILL FACILITATE THE LIFTING OUT OF SUCH LAYERED INSERTS.

WHEN ADDING TOOLS IN DRAWERS WITH LAYERED INSERTS AT A LATER DATE, TRACE THE SILHOUETTE OF THE TOOL, THEN CUT THROUGH BOTH LAYERS OF THE HAZ*MAT FOAM AND REMOVE THE PLUG. IN SOME SITUATIONS, YOU MAY WISH TO CUT THE PLUG IN ORDER TO USE PART OF THE PLUG TO RAISE THE HEIGHT OF THE TOOL IN THE POCKET.

ALWAYS CONSIDER THE DRAWER HEIGHT

IT’S ESSENTIAL IN TOOL LAYOUT TO KNOW YOUR TOP LEVEL CLEARANCE SO DRAWERS WILL OPEN & CLOSE WITHOUT INTERFERENCE

FOAM THICKNESS-SOME TOOLS REQUIRE TOOL POCKETS TO BE DEEPER TO PREVENT TOOL SHIFTING WHEN OPENING OR CLOSING TOOL STORAGE DRAWERS.

WE’VE FOUND TOOLS IN STRANGE PLACES!

IT’S A MISTAKE TO RUSH THROUGH PLANNING & DEVELOPMENT OF YOUR TOOL DRAWER SHADOW BOX INSERT. CAREFUL PLANNING, ORGANIZATION, COMMUNICATION & REVIEW ARE CRITICAL ELEMENTS IN PROPER DEVELOPMENT OF DRAWER INSERTS FOR TOOL CONTROL.



LESSONS-LEARNED

FOR IMPROVING YOUR DESIGNS

DETERMINE ALL OF THE TOOLS REQUIRED TO PERFORM A SPECIFIC TASK-INCLUDING INTERMITTENTLY USED TOOLS.

ALLOW FOR FUTURE GROWTH AND REVISIONS,-EXTRA SPACE FOR CHANGES AND ENGINEERING REVISIONS WHICH MAY REQUIRE ADDING NEW TOOLS LATER. EVERY DRAWER INSERT SHOULD HAVE OPEN SPACE. IN THE IDEAL SITUATION, AN ENTIRE DRAWER SHOULD BE LEFT AVAILABLE FOR FUTURE USE.

TOOLS SHOULD BE GROUPED BY SUB-TASK OR BY COMMON USAGE WHEREVER POSSIBLE. ONCE THE INITIAL GROUP OF TOOLS HAVE BEEN ORGANIZED, THE SIZE OF THE ROLL CABINET AND/OR TOOL CHEST CAN BE DETERMINED. AVOID THE COMMON MISTAKE OF SELECTING CABINET AND CHEST *BEFORE* DETERMINING HOW MANY TOOLS ARE REQUIRED. **MAKING IT FIT DOESN' T WORK.**

DEVELOP A LIST OF THE SPECIFIC TOOLS TO BE PLACED IN EACH DRAWER. THIS LIST SHOULD IDENTIFY NOT ONLY THE TOOL NAME, BUT ALSO THE **FOD** PREVENTION TOOL CONTROL PROGRAM. EVENTUALLY THIS LIST WILL BECOME THE CONTROL LOG FOR THE TOOL INVENTORY CHECKLIST MANDATED FOR BOTH: **FOD DISCIPLINE AND FOD SWEEPS.**

TOOL CONTROL IS A MUST FOR SUCCESSFUL FOD DISCIPLINE

TOOL CONTROL LETS YOU SUCCESSFULLY PASS FOD SWEEPS



LESSONS LEARNED

POSITIVE TOOL CONTROL

FOR MORE SUCCESSFUL TOOL CONTROL PROGRAMS, CONSIDER

- *WORK CENTER OR CELL TOOL REQUIREMENTS*
- *USER INVOLVEMENT, TOOL LOCATION, NUMBER OF TOOLS*
- *GROUPING TOOLS BY SPECIFIED TASK/ACTIVITY/DRAWER*
- *CONFIRM REQUIREMENT FOR DUPLICATE TOOLS*
- *TOOLS USED MORE FREQUENTLY SHOULD BE MOST ACCESSIBLE*
- *TOOLS WHICH MAY BE ADDED IN FUTURE*
- *WHEN POSSIBLE, SMALLER TOOLS SHOULD BE IN THE FRONT*
- *PRELIMINARY DRAWER LAYOUT-CONFIRM CHEST/ROLL CABINET SIZE CONFIRM FIT OF EACH AND EVERY ITEM IN DRAWER*
- *ALL DRAWER LAYOUTS SHOULD BE MADE FIRST ON PAPER TRACINGS*
- *SPACING OF 1/2" SHOULD BE MAINTAINED- AS LAYOUT BECOMES CROWDED, FINGER HOLES WILL BE CRITICAL*



COMMON QUESTIONS

- A. HOW MANY TOOLS CAN I PUT IN A...
SEE LAYOUT EXAMPLES 1-800-388-8916
- B. HOW MUCH DOES TOOL CONTROL COST...HAND CUTTING...BUDGET
SEE CHART C... HELP 1-800-388-8916
- C. HOW DO I HANDLE NON SNAP-ON TOOLS...MISSING TOOLS
SUBMIT SILHOUETTE TRACING OR TOOL, AND A TOOL PART
NUMBER/DESCRIPTION WITH DRAWER LAYOUT WORKSHEETS
SEE INSTRUCTIONS
- D. TOOLS DON'T FIT...(1)-(2)
(1) SEE INSTRUCTIONS...HELP1-800-388-8916
(2) TIGHT/LOOSE POCKETS
- E. WHAT IS THE DIFFERENCE BETWEEN TROCELLEN AND ETHAFOAM...OTHER MATERIAL
CHAT(B) CHEMICAL RESISTANCE-TECH BENEFITS-PRICE
- F. AUTOMATIC SUBSTITUTIONS
COMPUTER GENERATED CHANGES...
- G. WHAT IS THE LEAD TIME
2-3 WEEKS...WHEN THE INSTRUCTIONS ARE FOLLOWED



COMMON QUESTIONS

HOW MANY TOOLS CAN I PUT IN A

NUMBER # OF TOOLS X 10.5 (OR MORE) = NUMBER OF SQUARE INCHES

DETERMINE THE USABLE DRAWER SPACE **SQUARE INCHES**

LENGTH X WIDTH= SQUARE INCHES **THEN**

ADD UP TOTAL AVAILABLE DRAWER SQUARES **INCHES**

(DETERMINE THE VARIANCE)

WHAT CAN I DO...

SPACE PROBLEM IDEAS

MAKING IT FIT DOESN'T WORK AND IS VERY EXPENSIVE



LESSONS LEARNED



ACCOUNTABILITY AND TOOL FOD PREVENTION AWARENESS CAN BE ENHANCED THROUGH THE INTRODUCTION OF CONTRASTING MATERIAL COLORS. A GOOD PRACTICE IS TO USE SOFT BAGS, TOOL TOTE TRAYS, OR OTHER SUITABLE CONTAINERS WHEN TOOLS NEED TO BE CARRIED TO SITES. TOOLS SHOULD BE TETHERED OR SUITABLY RESTRAINED TO THE USER IN AREAS AROUND STRUCTURAL WORKSTANDS OR ANY OTHER AREA WHERE A DROPPED TOOL COULD CAUSE DAMAGE OR BE DIFFICULT TO RETRIEVE IF DROPPED

FOD CONTROL IS A TEAM ACTIVITY THAT COMBINES AWARENESS, SYSTEM AND PROCEDURES, DEDICATION, DISCIPLINE, AND A FINANCIAL COMMITMENT.

ACCOUNTABILITY REQUIRES A SYSTEM THAT IS USER FRIENDLY AND EASY TO MONITOR. MANAGEMENT MUST BE COMMITTED TO DAILY FOD AUDITS AND SUPPORTIVE AWARENESS PROGRAMS. WORK CENTER FOD FACILITATORS PLAY AN IMPORTANT ROLE IN IMPLEMENTING AND MAINTAINING THE SYSTEM .



LESSONS LEARNED

- **DRAWER HEIGHT**
- **DRAWER INSIDE DIMENSIONS**
 - **CHARACTERISTICS**
- **NEED A FULL PART NUMBER**
- **FOAM THICKNESS**
- **TOOLS WITH ADAPTERS**

USER FRIENDLY

CRITICAL CONSIDERATION

HINGE RELIEF-FRONT/REAR LIPS
LOCK RELIEF-DIVIDERS

FUTURE REFERENCE-
SIGNIFICANT SIZE CHANGE

SOCKET-HORZ/VERTICAL

AIR TOOLS



- **LESSONS LEARNED**

USER FRIENDLY

- **TOOL...PLUS**

MAGNETIC SCREW DRIVERS

- **POCKET TOLERANCES**

(1/8"- 1/16")-NOTE, SOME TOOLS VARY IN SIZE

- **FINGER HOLES**

USER FRIENDLY

- **OBSOLETE TOOL POCKETS**

COLORED PLUGS

- **BROKEN TOOL POCKETS**

COLORED PLUGS



LESSONS LEARNED

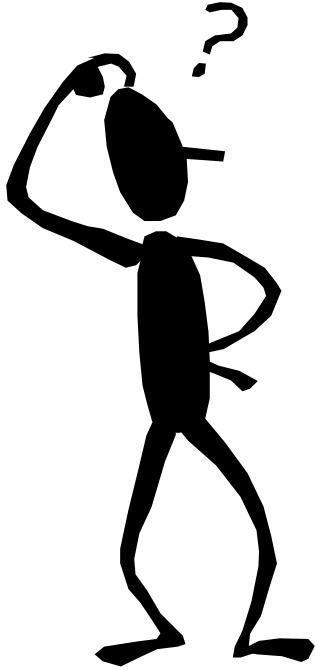
POSITIVE TOOL CONTROL

TO RESOLVE SPACE PROBLEMS, CONSIDER:

- VERTICAL TOOL PLACEMENT -ON EDGE VS. FLAT
- USE DRAWER SIDES AS PART OF THE TOOL POCKET
- INTERLOCK TOOLS
- COMMON POCKETS CONTAINING MORE THAN ONE TOOL
- STAGGER TOOL PLACEMENT
- MULTIPLE LAYERS (HEIGHT OF DRAWER MUST BE ADEQUATE)...TOTE/PALLET CONCEPT
- REDUCED SPACING BETWEEN SMALL TOOLS
- LOCATE SMALL TOOLS INSIDE OF LARGE TOOLS
- DON'T FORGET TO RESERVE OPEN GROWTH OR SPACE FOR GROWTH OR CHANGE
- REMOVABLE-INSERTS WITHIN INSERTS-DEEP DRAWERS
- IT'S ESSENTIAL IN TOOL LAYOUT TO KNOW YOUR TOP LEVEL CLEARANCE SO DRAWERS WILL OPEN AND CLOSE WITHOUT INTERFERENCE.
- FRONT AND REAR INSIDE DRAWER LIPS-FLANGES



HELP!



1-800-388-8916



THANK YOU!



DEFINITIONS

MIGRATORY PATH	PATH A TOOL FOLLOWS TRYING TO FIND OPEN SPOT
TOOL HOLES	PORTHOLES DRILLED INTO STORAGE UNITS WHEN TOOLS ARE LARGER THAN THE DRAWER
ROMP IS THE SWAMP	WHAT HAPPENS WHEN TOOL CONTROL DRAWER LAYOUTS ARE DEVELOPED WITHOUT USER INVOLVEMENT
ALIEN ARTICLE	PERSONAL TOOL ADDED AT A LATER DATE
REAL UGLY	NOT MY BROTHER- IN LAW'S DOG- SHIPPING A TOOL CONTROLER ORDER AND RECEIVING A CALL ASKING HELP TO ADD 70 TOOLS
RELIEF BENDS	ALTERNATE PROCEDURE TO DRILLING TOOL HOLES INTO STORAGE UNITS
SHADOW BOX	ACTUALLY THE SECOND STORAGE UNIT/USUALLY PURCHASED AFTER RECEIPT OF THE FIRST UNIT



DEFINITIONS CONTINUED...

TETHER	DEVICE USED TO TIE EXCESS TOOLS ONTO A ROLL CABINET
INACCESSIBLE AREA	DRAWER FULL BEYOND COMMON SENSE
TOTE	DEVICE USED TO CARRY TOOLS FROM THE CRIB-USUALLY THOSE THAT DON'T FIT
HANDLING	PHONE CALL THAT STARTS WITH THE PHRASE-YOUR GONNA BE OPEN-MINDED WITH THE LAYOUTS ...
LESSON LEARNED	2ND TIMERS
BORESCOPE	NOT A PROSCOPE-DEVICE USED TO LOOK INTO DRAWERS THAT DON'T OPEN
FEEDBACK	FEELING YOU GET WHEN TOOLS ARE TOO HIGH IN DRAWER AND YOU TRY TO CLOSE IT



DEFINITIONS CONTINUED...

FREE RADICAL	TOOL THAT ENDS UP IN THE LARGE BOTTOM DRAWER
INVASIVE	TERM WE USE FOR TOOLS INSIDE OF TOOLS
FREE SWING	NOT A TETHER/TOP OF A TOOL CABINET THAT WON'T CLOSE
DETERIORATION	TERM USED TO DESCRIBE TOOL ADDITIONS/ECO LATER DATE WITH NO ROOM FOR NEW TOOL
DISCHARGE	NOT ESD-TOOLS JUMPING OUT OF POCKETS WHEN YOU MOVE ROLL CABINET-USUALLY THE FOAM NOT DEEP ENOUGH
OVERLOAD	USUALLY VISIBLE WHEN SIDE CABINETS ADDED OR A LADDER IS NEEDED TO REACH TOP DRAWERS (ARRANGE DRAWER TO CONSIDER THICKNESS HEIGHT)
STATE OF THE ART EQUIPMENT	

