DCN 1376

NAVAL AVIATION SYSTEMS TEAM

OVERVIEW BRIEF TO THE BASE CLOSURE AND REALIGNMENT COMMISSION STAFF

13 FEBRUARY 1995

RADM R.W. SMITH - AIR-6.0
ASST CDR FOR AVIATION INDUSTRIAL CAPABILITIES

OUTLINE

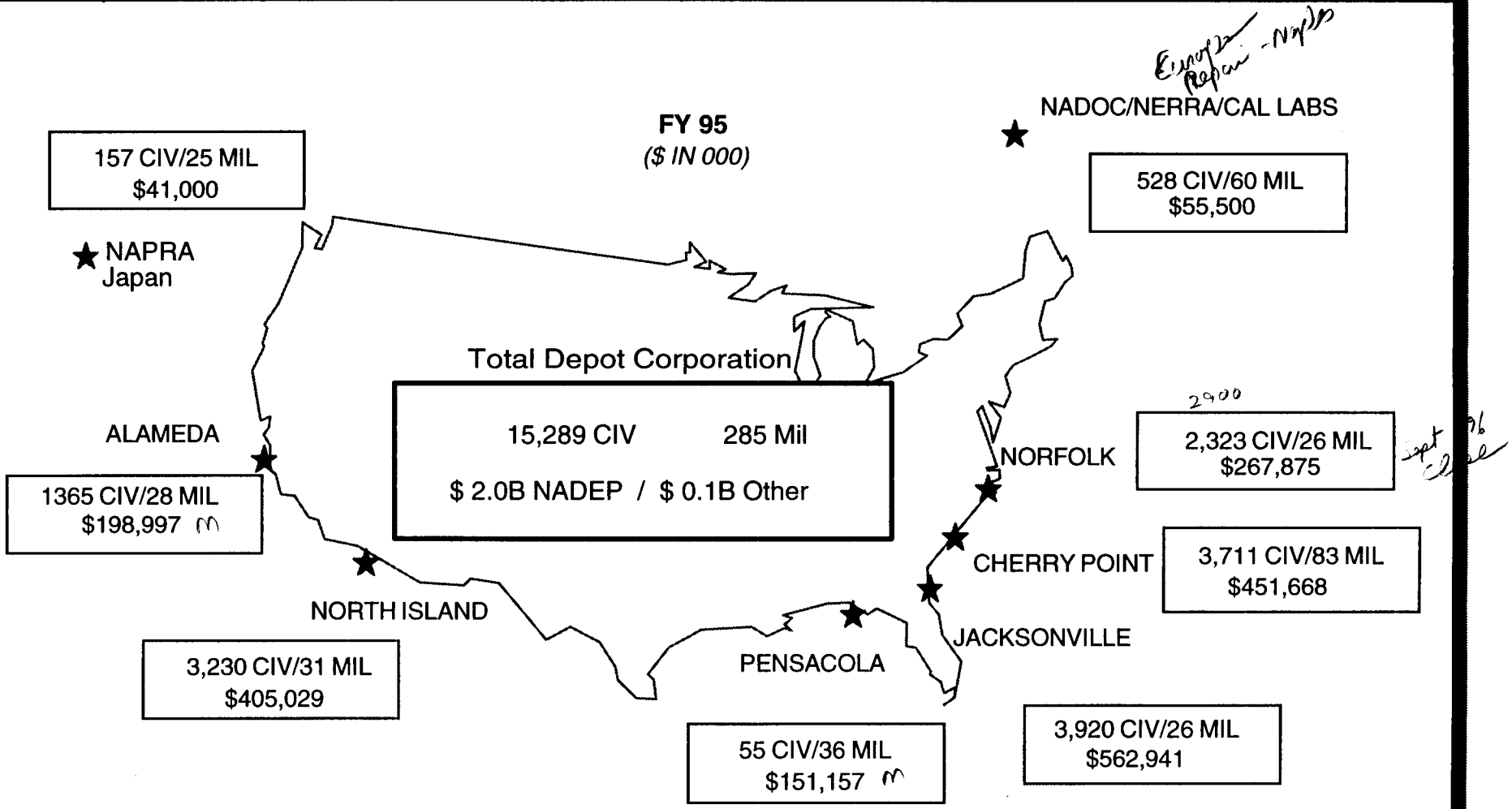
NAVAL AVIATION SYSTEMS TEAM

- OVERVIEW
  - ✓ ORGANIZATION
  - ✓ WORKLOAD
- REDUCING THE INFRASTRUCTURE
  - ✓ TRENDS
  - ✓ BRAC-93
  - ✓ INTERSERVICING

NAVAL AVIATION DEPOT MAINTENANCE

NAVAL AVIATION SYSTEMS TEAM

FY 95
($ IN 000)



SOURCE: FY93-94 ACTUALS, FY95-97 BASED ON FY96/97 PRESIDENT'S BUDGET

BOTTCMA

NAVAL AVIATION INDUSTRIAL TEAM

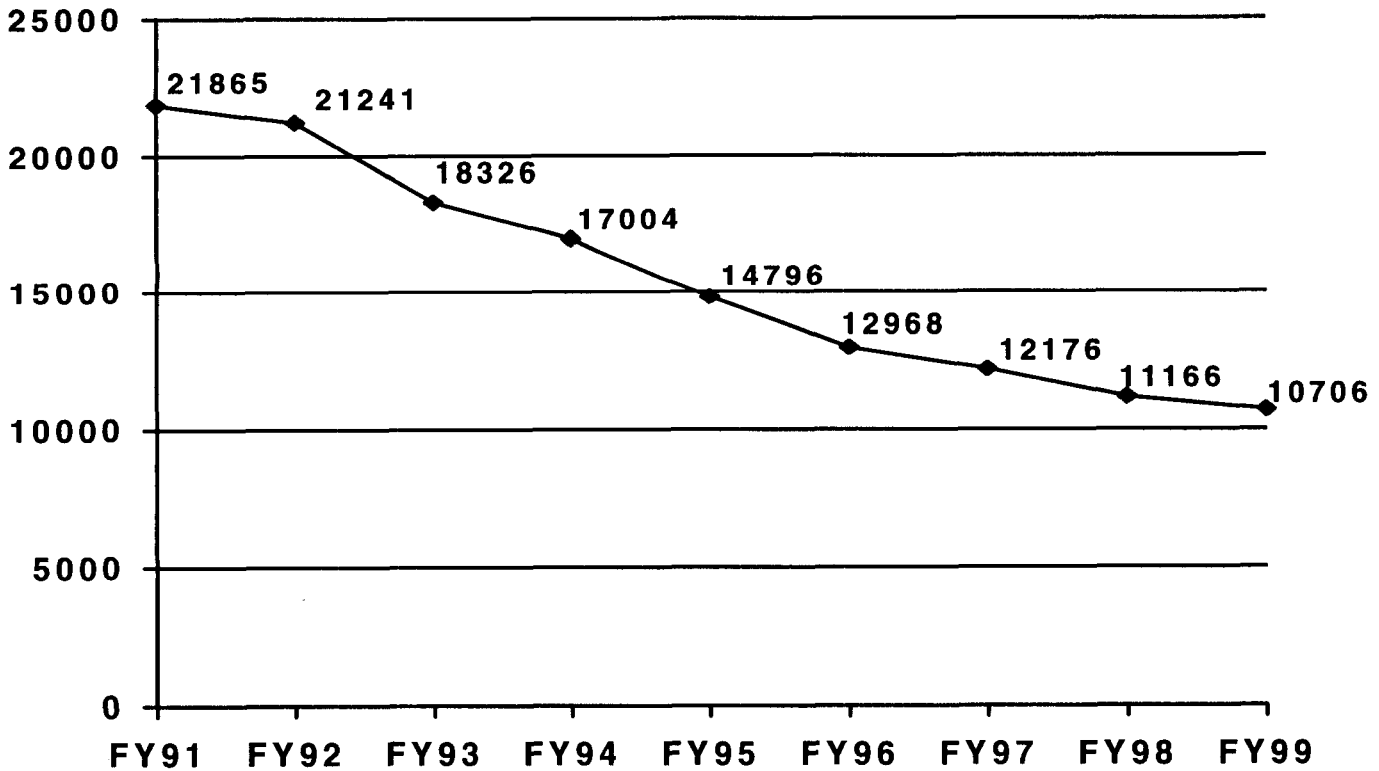
NAVAL AVIATION SYSTEMS
TEAM

- $2.1 BILLION
- 15,289 PEOPLE
- FY-95 WORKLOAD INCLUDES:
  - 486 AIRCRAFT
  - 1556 ENGINES
  - 119,951 COMPONENTS
  - 8.9 MILLION MANHOURS OF DIRECT FLEET SUPPORT

E/S AND $s BASED ON FY96/97 PRESIDENT'S BUDGET AND INCUDES NADEPs, NADOC, NAPRA, INTERSERVICE, COMMERCIAL WORKLOAD/MANHOURS BASED ON DEC 94 FRSM RESULTS

INDUSTRIAL CAPABILITIES CIVILIAN REDUCTION PLAN

NAVAL AVIATION SYSTEMS TEAM



26,000 people (about 1/2) type

with 60/40

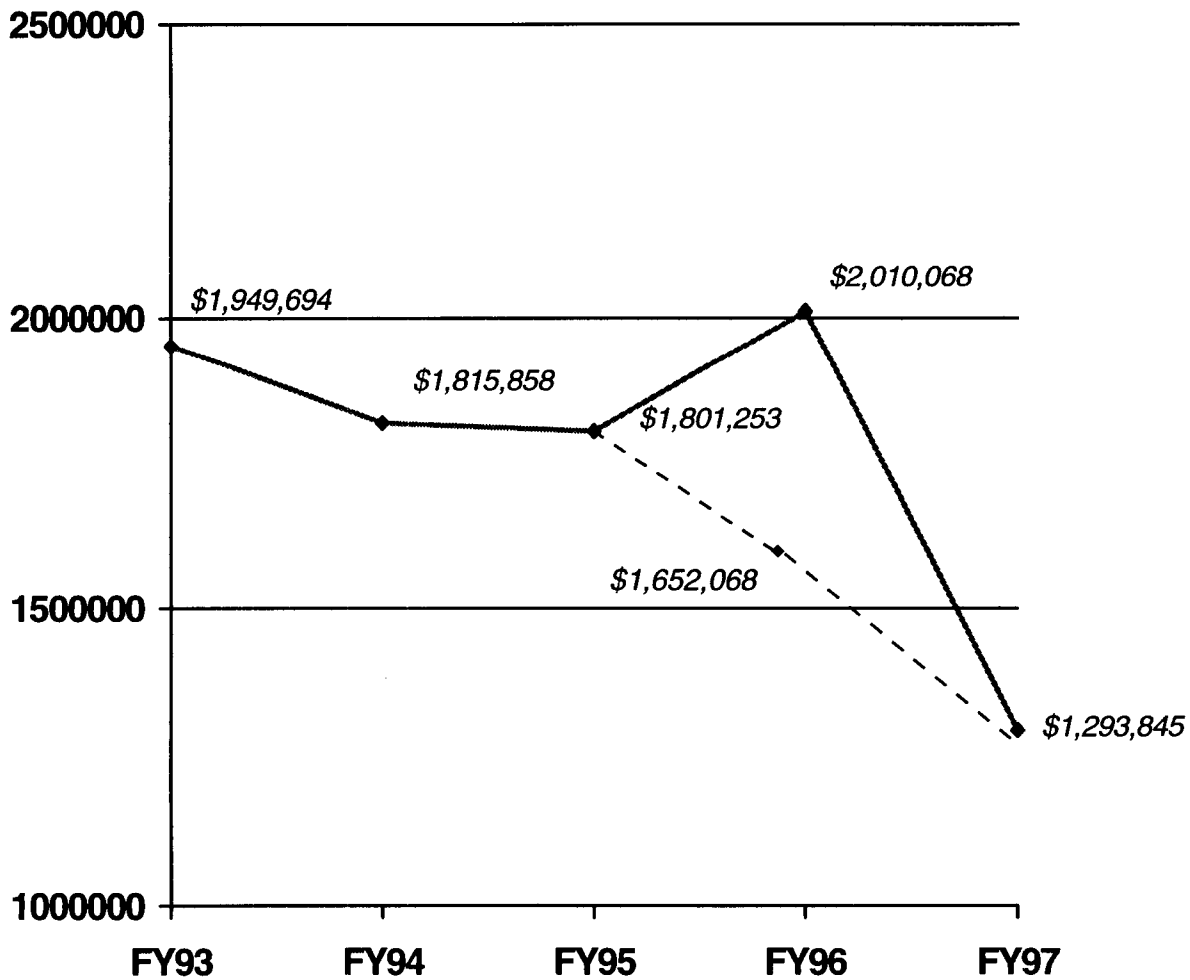
* NADEPS AND NADOC, EXCLUDES AIR-6.0, NAWC-AD

51% REDUCTION

SOURCE: FY91-93 ACTUALS, FY94-97 OSD/OMB BUDGET

FUNDING TREND
($ IN 000)

NAVAL AVIATION SYSTEMS TEAM



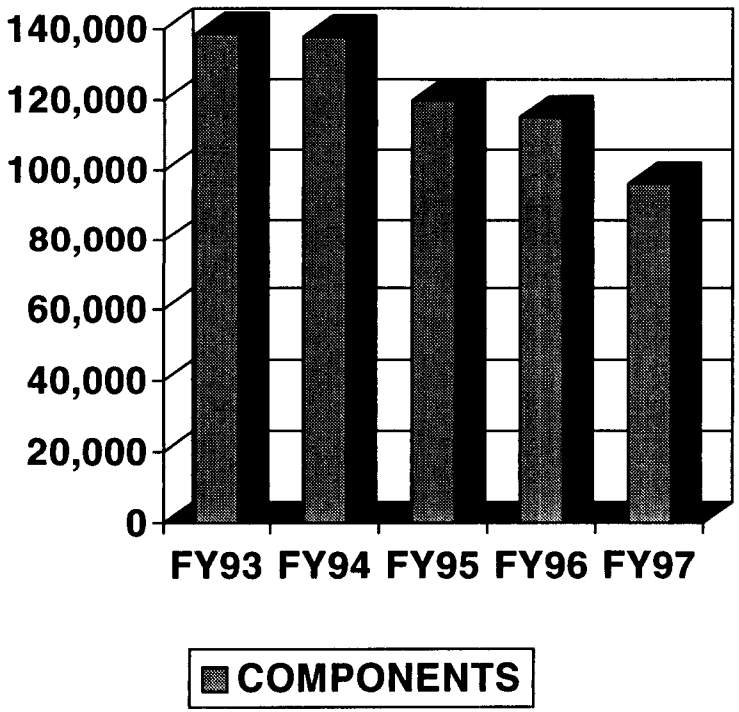
NLOC11

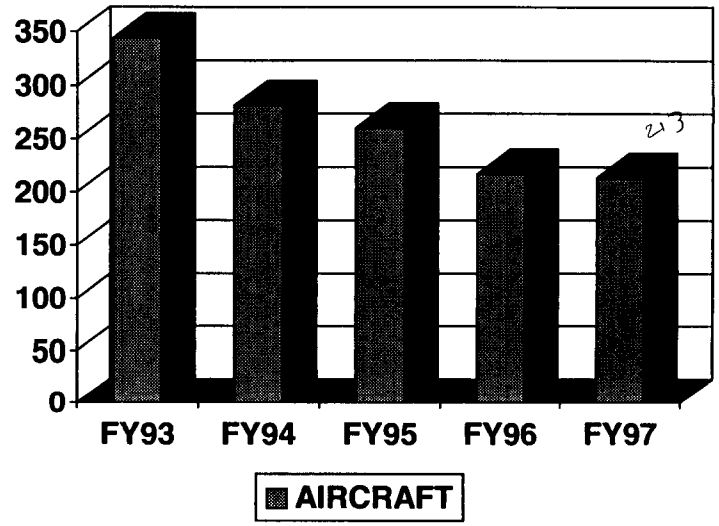
SOURCE: FY93-94 ACTUALS, FY95-97 BASED ON FY96/97 OSD/OMB BUDGET SUBMIT

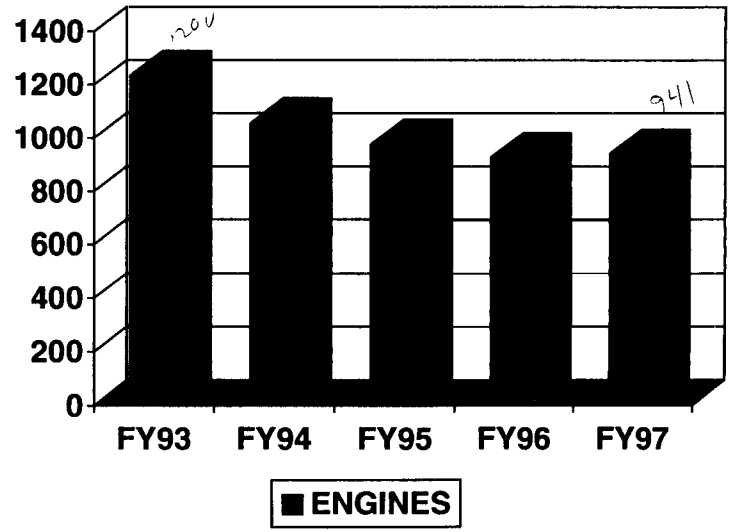
WORKLOAD TRENDS

(# OF UNITS)

NAVAL AVIATION SYSTEMS TEAM







24-252 Document - Post

NLOC12

NAVAL AVIATION DEPOTS BEFORE BRAC-93

NAVAL AVIATION SYSTEMS TEAM

NADEP ALAMEDA

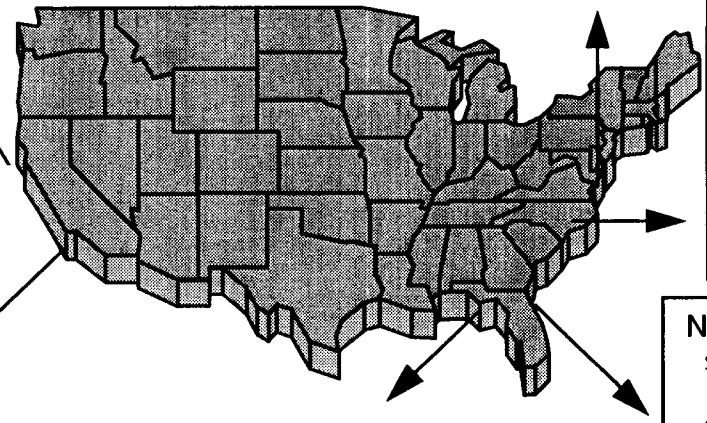
- AIRCRAFT & COMPONENTS
  - S-3, A-6, P-3 (MODS)
- ENGINES & COMPONENTS
  - TF-34, T56
- SUPPORT EQUIPMENT
  - ALL WEST COAST NON-AVIONIC COMMON SE
- TECHNOLOGY
  - GUN REPAIR AND TEST
  - APUs
  - AIRCRAFT PROPELLERS
  - AIR REFUELING STORES
  - GUIDED MISSILES

NADEP NORFOLK

- AIRCRAFT & COMPONENTS
  - F-14, A-6, EA-6B
- SUPPORT EQUIPMENT
  - AUTOMATIC TEST EQUIPMENT
- TECHNOLOGY
  - MISSILES
  - HYDRAULIC SYSTEMS
- EAST COAST HUB DEPOT
  - CONSOLIDATED INDIRECT BUSINESS SUPPORT FUNCTIONS

NADEP CHERRY POINT

- AIRCRAFT & COMPONENTS
  - AV-8B, H-46, A-4, F-4
- ENGINES & COMPONENTS
  - T-58, T-76, T-400, J79 F-402, T-64
- SUPPORT EQUIPMENT
  - ALL EAST COAST NON-AVIONIC COMMON SE
- TECHNOLOGY
  - BLADES & VANES
  - FCIM
  - UAV/RPV



NADEP NORTH ISLAND

- AIRCRAFT & COMPONENTS
  - E-2, C-2, F/A-18
- SUPPORT EQUIPMENT
  - CASS
- TECHNOLOGY
  - MOBILE FACILITIES
  - COMPOSITE REPAIR
  - BEARINGS
  - INERTIAL NAV SYSTEMS
- WEST COAST HUB DEPOT
  - CONSOLIDATED INDIRECT BUSINESS SUPPORT FUNCTIONS
  - NAVY PRIMARY STANDARDS LAB

NADEP PENSACOLA

- AIRCRAFT
  - SH-60, H-53, AH-1, H-3
- TECHNOLOGY
  - DYNAMIC COMPONENTS
  - ALTIMETERS/GENERATORS
  - RUBBER TECHNOLOGY

NADEP JACKSONVILLE

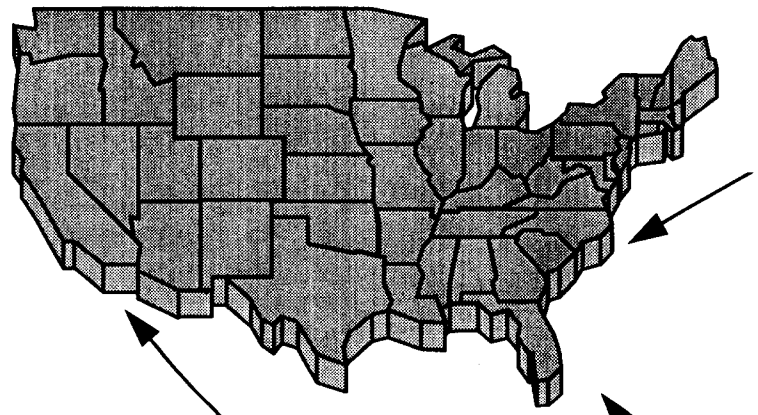
- AIRCRAFT & COMPONENTS
  - P-3, T-2
- ENGINES & COMPONENTS
  - J-52, F-404
- SUPPORT EQUIPMENT
  - ELECTRO-OPTICAL
- TECHNOLOGY
  - EO/EW SYSTEMS
  - ENVIRONMENTAL

ALOC5

NAVAL AVIATION DEPOTS AFTER BRAC-93

NAVAL AVIATION SYSTEMS TEAM

- ✔ CLOSE 3 NADEPS
- ✔ REALIGN REMAINING NADEPS
  - ONE TACAIR- EAST
  - ONE TACAIR-WEST
  - ONE ROTARY WING/VSTOL
- ✔ AH-1W/SH-60 HELOS TO CCAD
- ✔ T-56 ENGINE TO SA-ALC done
- ✔ NON-CORE COMPONENTS AND THE H-3, A-4, T-2, T-45 AIRCRAFT TO PRIVATE INDUSTRY



ROTARY WING\VSTOL

NADEP CHERRY POINT

AIRCRAFT
- F-4, AV-8B, H-46, V-22(P) **H-53**

ENGINES
- T58, T76, T400, F402, T64, J79

COMPONENTS
- DYNAMIC COMP
- ROTOR BLADES
- PROPS
- BLADES/VANES
- APU/GTC
- PNEUMATICS
- NON-AVIONICS SPT. EQUIP.

TECHNOLOGY
- VERTICAL FLIGHT
- FCIM
- UAV/RPV
- COMPOSITE REPAIR

WEST COAST TACAIR

NADEP NORTH ISLAND

AIRCRAFT
- E-2, C-2, F/A-18 **S-3**

ENGINES
- LM2500

COMPONENTS
- CATE
- INSTRUMENTS
- COMM/IFF
- NAV/ELEC
- RADAR
- CSD/ROTATING ELEC.

TECHNOLOGY
- COMPOSITE REPAIR
- BEARINGS
- CALIBRATION
- HYDRAULICS
- **COMMON ATE**

EAST COAST TACAIR

NADEP JACKSONVILLE

AIRCRAFT
- P-3 **EA-6B, F-14**

ENGINES
- J52, F404 **TF34**

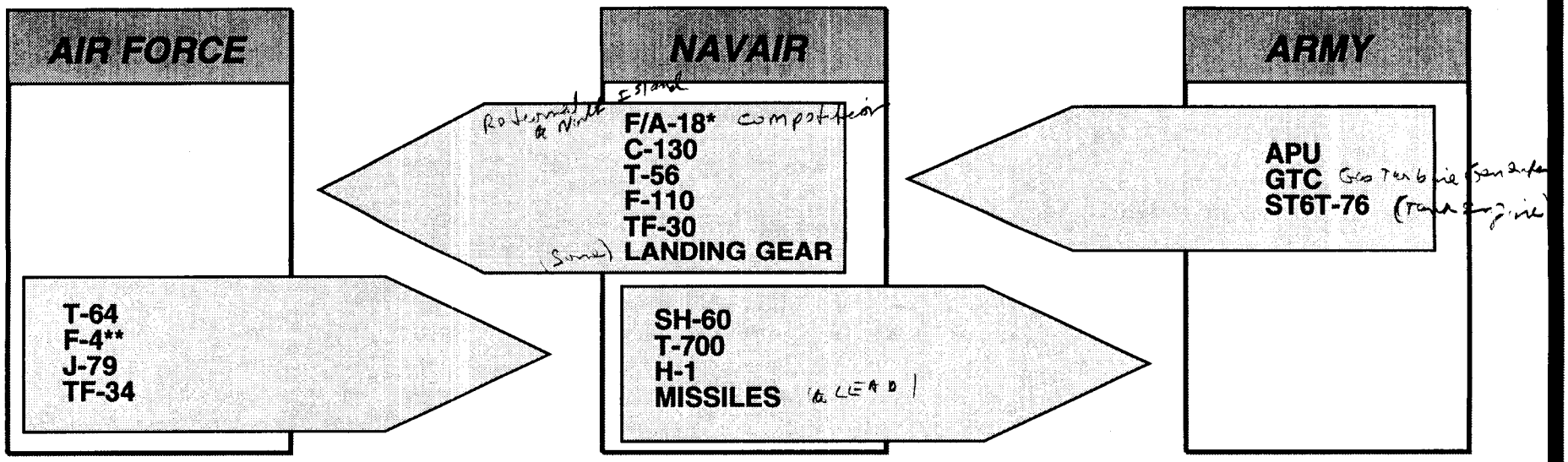
COMPONENTS
- ELECTRO-OPTICS
- ASW SYSTEMS
- RACKS/LAUNCHERS
- AIR REFUELING STORES
- ELECTRONIC WARFARE

TECHNOLOGY
- EO/EW
- ENVIRONMENTAL

BRAC1

INTERSERVICE INITIATIVES

NAVAL AVIATION SYSTEMS TEAM



✓ FY95 DoD APPROPRIATION ACT

✓ FY95 DoD AUTHORIZATION ACT (OVER $3M)

✓ 4 MAY 94 DEPSECDEF MEMO

* *STATUS - F-18 - OPTION NOT EXERCISED*

** *STATUS - F-4 - TO RETIRE VICE TRANSITIONING TO CHERRY POINT*

NLOC9

NAVAIR'S DM INTERSERVICING CONTRIBUTION

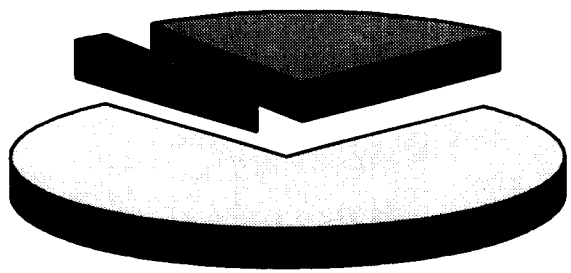
NAVAL AVIATION SYSTEMS TEAM

(O&M $M)

1/4 in progress by 1997

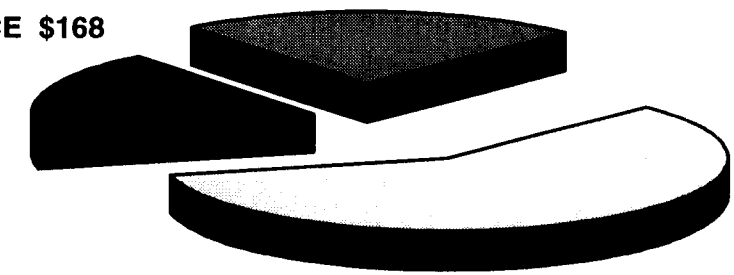
3 NADEPS will be full

FY 90



TOTAL $1,019

FY 95



45 & 47 % is core

TOTAL $ 914

SOURCE: FY90 COL 90/91 PB; FY95 COL 96/96 OSD/OMB BUDGET

GEOPIE

Document Separator

COMPARABILITY ISSUES

- *COST COMPARABILITY HANDBOOK identified problem areas when preparing UNIT cost estimates.*
- *"Nothing" is free.*
- *Adjustment required when expenses are paid by external appropriations.*

  Engineering Design Support = "Free" to all Depots except Navy

  On-base health services = "Free" to Navy, Army, Marine

  Legal = "Free" to Air Force

  Impact Aid = "Free" to all services

- *WHEN COMPUTING UNIT COSTS, the Direct Vs. Indirect argument does not effect total costs, therefore not a consideration.*

COMPARABILITY ISSUES

- *A NAVY DIRECT LABOR HOUR is NOT comparable to an AIR FORCE DIRECT LABOR HOUR.*
- *NAVY Budgets are based on "Norm" hours.*
  Norm hours are limited to planned wrench turning time.
- *NAVY INDIRECT includes:*

  First line supervision
  Shop clean-up
  Reprocessing of defective work
  Maintenance of shop equipment
  Calibration of shop equipment
  Material management
  Allowed time
  Training

COMPARABILITY ISSUES

- *AIR FORCE codes people as DIRECT or INDIRECT*
- *A blue collar Direct person will always be charged as direct unless an exception clocking is made.*
- *Total "direct" hours are prorated to products based on standard hours (norms).*
- *Audits give NAVY high marks in charging discipline.*
- *NAVY accounting system, NIFMS, received highest marks.*

UNIT COST AND RATE COMPARISON

	DIRECT LABOR	PROD OVHD	GEN & ADM OVHD	UNIT MATL	DIR LAB HRS (DLH)	UNIT PRICE	$/DLH
UNIT ABC	$20.00	$30.00	$15.00	$2,000	100	$8,500	$85.00
ASSUMPTIONS:							
PRODUCTIVITY INCREASE, DLH DECREASE	$20.00	$30.00	$15.00	$2,000	75	$6,875	$91.67
MATL PRICE DECREASE; DLH INCREASE	$20.00	$30.00	$15.00	$1,500	125	$9,625	$77.00
DLH DECREASE, P(OH) INCREASE	$20.00	$39.71	$15.00	$2,000	87	$8,500	$97.70
MATL PRICE INCREASE	$20.00	$30.00	$15.00	$2,500	100	$9,000	$90.00

NOTE: UNIT PRICE IS DETERMINED BY MULTIPLYING THE DIRECT LABOR, PRODUCTION OVERHEAD AND G&A BY THE DIRECT LABOR HOURS AND THEN ADDING THE MATERIAL PRICE.

Document Separator

NAVAL AVIATION DEPOT OPERATIONS CENTER

NAVAL AVIATION SYSTEMS TEAM

BASE CLOSURE & REALIGNMENT for NAVAL AVIATION DEPOTS

Presentation to the BCRC Staff

13 February 1995

REPRODUCED AT GOVERNMENT EXPENSE

NAVAIR CORE SUMMARY
USING DoD CORE FLOW PROCESS

(A)

assume 2 major regional conflicts w/ #8 weapons plan that would be employed

JCS SCENARIO
INPUT BY T/M/S
ENGINES/COMPS
OTHER SUPPORT

HRS: _____

5 days 12 hrs/day
2 " 10 " "

(B)

30% increase

WORKLOAD ADJUST
TIMES INCREASED
OP TEMPO
(1.3 FACTOR)

HRS: _____

(C)

looked at trade skills

EST SCENARIO
WORKLOAD
(TOTAL BLOCKS A AND B)

HRS: _____

(D)

TRADE SKILL
BREAKDOWN

(E)

RESOURCE
ADJUSTMENT
(1.6)

HRS: _____

(F)

BASIC CORE
ADJUSTMENT
(TOTAL BLOCKS C AND E)

HRS: _____

(G)

before hit choke points could increase 12.5%

ADJUST (12.47%)
ECONOMY/
EFFICIENCY

HRS: _____

(H)

PEACETIME
CORE
(TOTAL BLOCKS F AND G)

HRS: _____

(I)

want more to private

LAST SOURCE
REQUIREMENTS

HRS: _____

plan to go down to core 13 million hours by '99
4 million outsourced next in house

(J)

TOTAL ORGANIC CAPABILITY
REQUIREMENTS
(TOTALS BLOCKS H AND I)

HRS: _____

12/60 20/30

NAVAL AVIATION SYSTEMS
TEAM

OVERVIEW BRIEF TO THE
BASE CLOSURE AND REALIGNMENT COMMISSION STAFF

13 FEBRUARY 1995

" 50% excess capacity "

RADM R.W. SMITH - AIR-6.0
ASST CDR FOR AVIATION INDUSTRIAL CAPABILITIES

OUTLINE

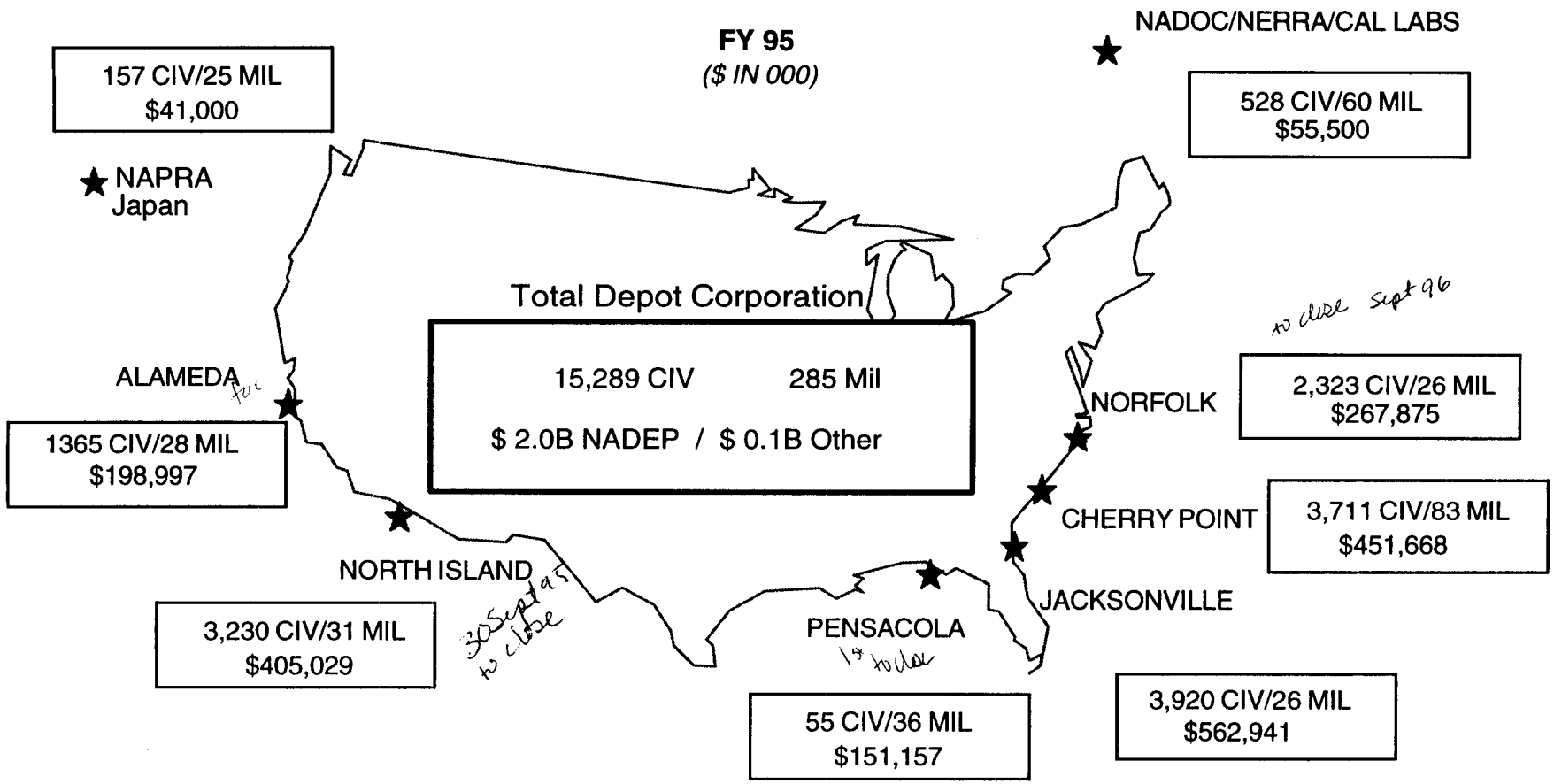
NAVAL AVIATION SYSTEMS TEAM

- OVERVIEW
  - ✓ ORGANIZATION
  - ✓ WORKLOAD
- REDUCING THE INFRASTRUCTURE
  - ✓ TRENDS
  - ✓ BRAC-93
  - ✓ INTERSERVICING

NAVAL AVIATION DEPOT MAINTENANCE

NAVAL AVIATION SYSTEMS TEAM

FY 95
($ IN 000)



SOURCE: FY93-94 ACTUALS, FY95-97 BASED ON FY96/97 PRESIDENT'S BUDGET

BOTTCMA

NAVAL AVIATION INDUSTRIAL TEAM

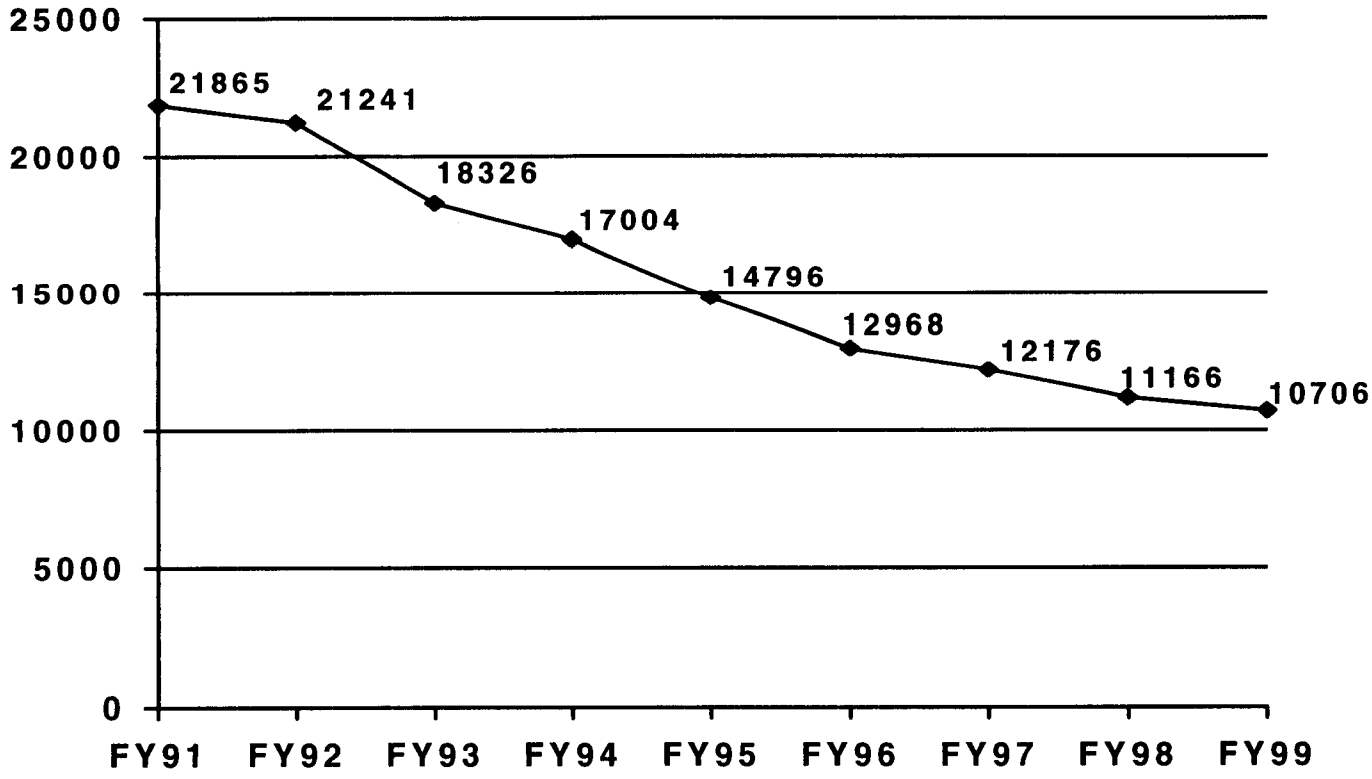
NAVAL AVIATION SYSTEMS
TEAM

- $2.1 BILLION
- 15,289 PEOPLE
- FY-95 WORKLOAD INCLUDES:
  - 486 AIRCRAFT
  - 1556 ENGINES
  - 119,951 COMPONENTS
  - 8.9 MILLION MANHOURS OF DIRECT FLEET SUPPORT

E/S AND $s BASED ON FY96/97 PRESIDENT'S BUDGET AND INCUDES NADEPs, NADOC, NAPRA, INTERSERVICE, COMMERCIAL WORKLOAD/MANHOURS BASED ON DEC 94 FRSM RESULTS

INDUSTRIAL CAPABILITIES CIVILIAN REDUCTION PLAN

NAVAL AVIATION SYSTEMS TEAM



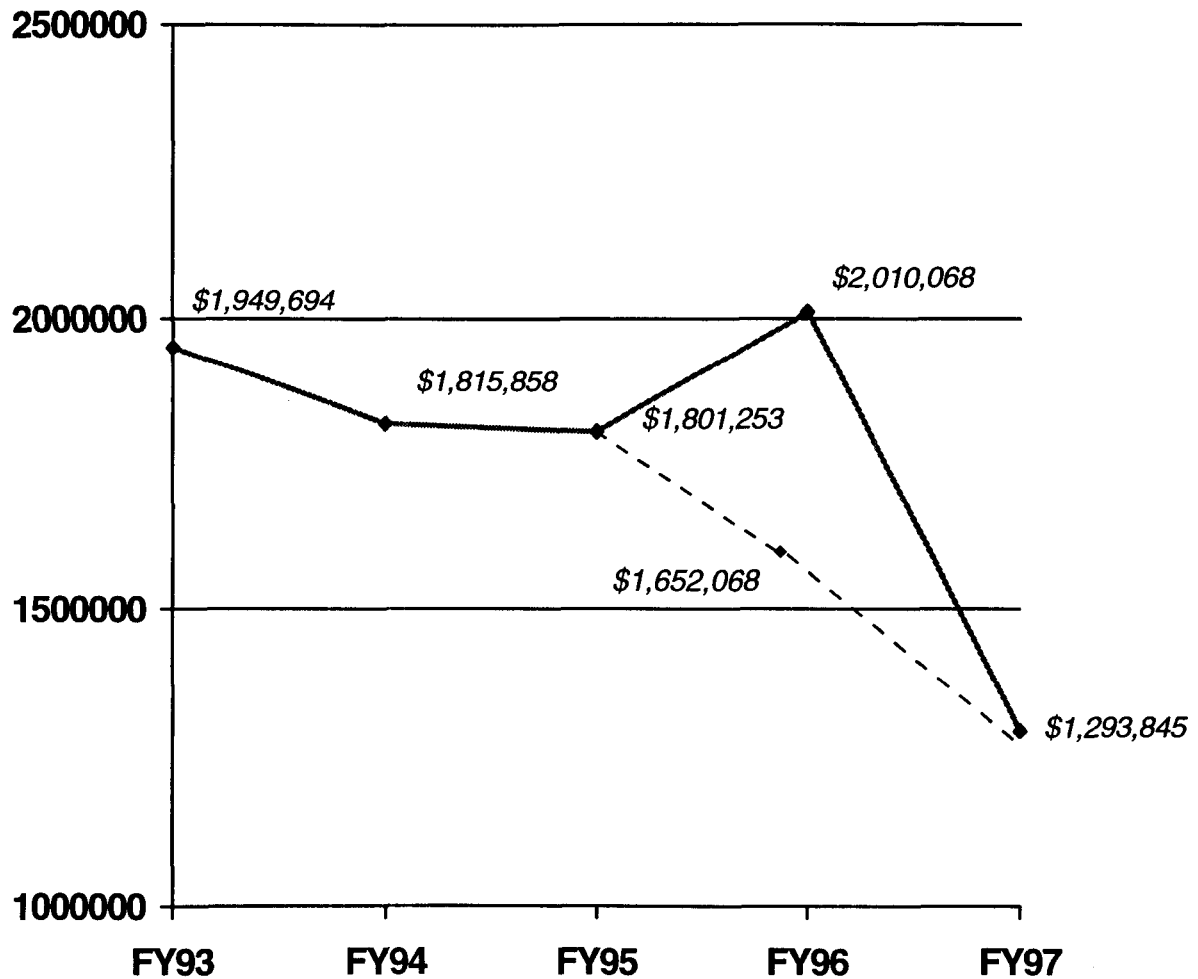
* NADEPS AND NADOC, EXCLUDES AIR-6.0, NAWC-AD

51% REDUCTION

SOURCE: FY91-93 ACTUALS, FY94-97 OSD/OMB BUDGET

FUNDING TREND
($ IN 000)

NAVAL AVIATION SYSTEMS TEAM



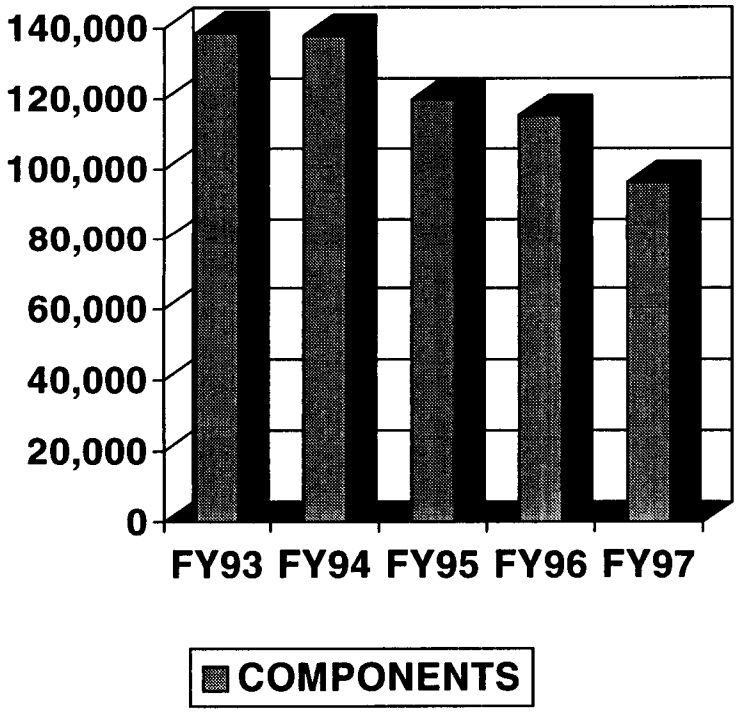
NLOC11

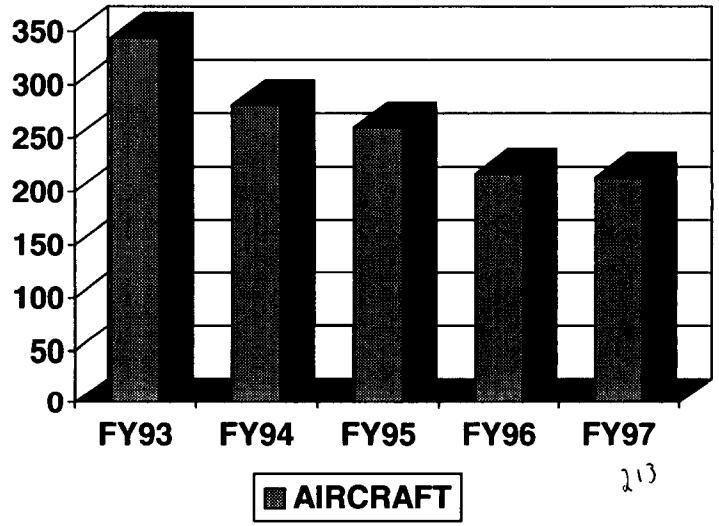
SOURCE: FY93-94 ACTUALS, FY95-97 BASED ON FY96/97 OSD/OMB BUDGET SUBMIT

WORKLOAD TRENDS

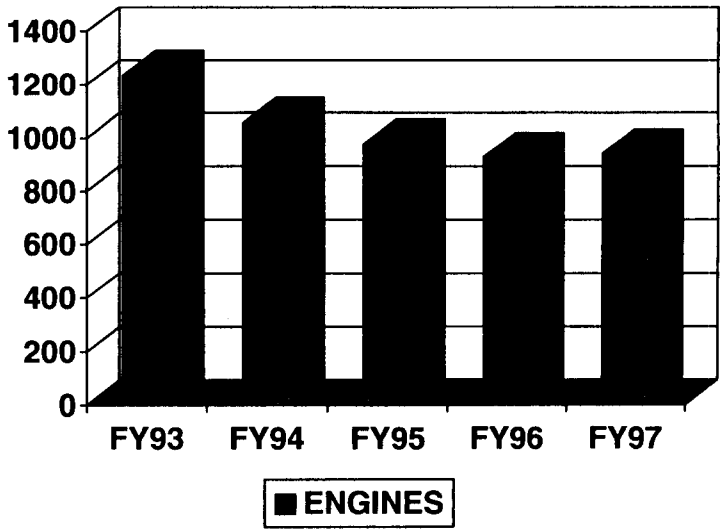
(# OF UNITS)

NAVAL AVIATION SYSTEMS TEAM





213



NLOC12

fleet 25% depot 51%

NAVAL AVIATION DEPOTS BEFORE BRAC-93

NAVAL AVIATION SYSTEMS TEAM

NADEP ALAMEDA

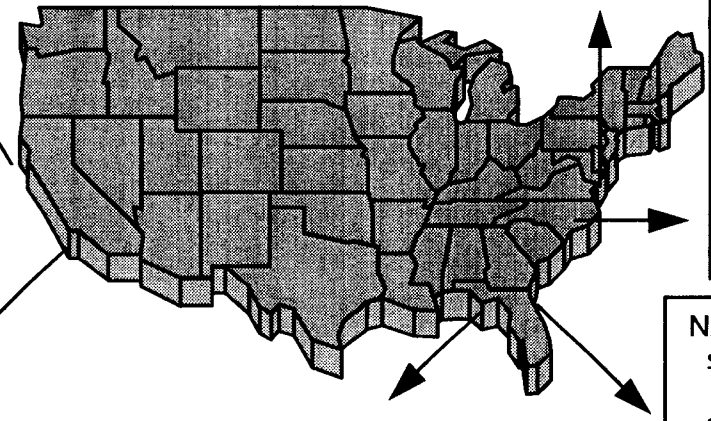
- AIRCRAFT & COMPONENTS
  - S-3, A-6, P-3 (MODS)
- ENGINES & COMPONENTS
  - TF-34, T56
- SUPPORT EQUIPMENT
  - ALL WEST COAST NON-AVIONIC COMMON SE
- TECHNOLOGY
  - GUN REPAIR AND TEST
  - APUs
  - AIRCRAFT PROPELLERS
  - AIR REFUELING STORES
  - GUIDED MISSILES

NADEP NORFOLK

- AIRCRAFT & COMPONENTS
  - F-14, A-6, EA-6B
- SUPPORT EQUIPMENT
  - AUTOMATIC TEST EQUIPMENT
- TECHNOLOGY
  - MISSILES
  - HYDRAULIC SYSTEMS
- EAST COAST HUB DEPOT
  - CONSOLIDATED INDIRECT BUSINESS SUPPORT FUNCTIONS

NADEP CHERRY POINT

- AIRCRAFT & COMPONENTS
  - AV-8B, H-46, A-4, F-4
- ENGINES & COMPONENTS
  - T-58, T-76, T-400, J79 F-402, T-64
- SUPPORT EQUIPMENT
  - ALL EAST COAST NON-AVIONIC COMMON SE
- TECHNOLOGY
  - BLADES & VANES
  - FCIM
  - UAV/RPV



NADEP NORTH ISLAND

- AIRCRAFT & COMPONENTS
  - E-2, C-2, F/A-18
- SUPPORT EQUIPMENT
  - CASS
- TECHNOLOGY
  - MOBILE FACILITIES
  - COMPOSITE REPAIR
  - BEARINGS
  - INERTIAL NAV SYSTEMS
- WEST COAST HUB DEPOT
  - CONSOLIDATED INDIRECT BUSINESS SUPPORT FUNCTIONS
  - NAVY PRIMARY STANDARDS LAB

NADEP PENSACOLA

- AIRCRAFT
  - SH-60, H-53, AH-1, H-3
- TECHNOLOGY
  - DYNAMIC COMPONENTS
  - ALTIMETERS/GENERATORS
  - RUBBER TECHNOLOGY

NADEP JACKSONVILLE

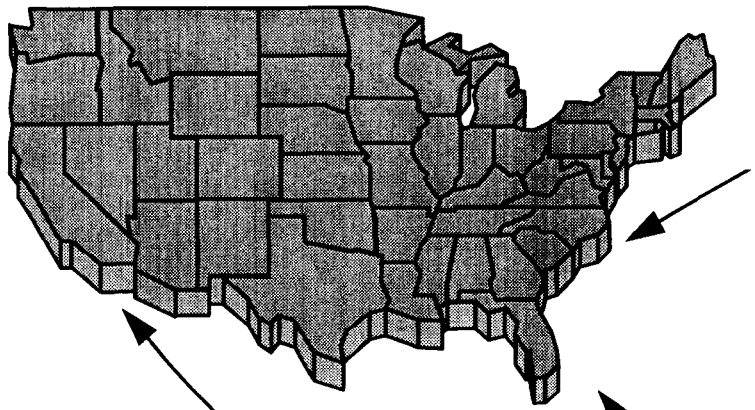
- AIRCRAFT & COMPONENTS
  - P-3, T-2
- ENGINES & COMPONENTS
  - J-52, F-404
- SUPPORT EQUIPMENT
  - ELECTRO-OPTICAL
- TECHNOLOGY
  - EO/EW SYSTEMS
  - ENVIRONMENTAL

ALOC5

NAVAL AVIATION DEPOTS AFTER BRAC-93

NAVAL AVIATION SYSTEMS TEAM

- ✔ CLOSE 3 NADEPS
- ✔ REALIGN REMAINING NADEPS
  - ONE TACAIR- EAST
  - ONE TACAIR-WEST
  - ONE ROTARY WING/VSTOL
- ✔ AH-1W/SH-60 HELOS TO CCAD
- ✔ T-56 ENGINE TO SA-ALC
- ✔ NON-CORE COMPONENTS AND THE H-3, A-4, T-2, T-45 AIRCRAFT TO PRIVATE INDUSTRY



ROTARY WING\VSTOL

NADEP CHERRY POINT

AIRCRAFT
- F-4, AV-8B, H-46, V-22(P) **H-53**

ENGINES
- T58, T76, T400, F402, T64, J79

COMPONENTS
- DYNAMIC COMP
- ROTOR BLADES
- PROPS
- BLADES/VANES
- APU/GTC
- PNEUMATICS
- NON-AVIONICS SPT. EQUIP.

TECHNOLOGY
- VERTICAL FLIGHT
- FCIM
- UAV/RPV
- COMPOSITE REPAIR

WEST COAST TACAIR

NADEP NORTH ISLAND

AIRCRAFT
- E-2, C-2, F/A-18 **S-3**

ENGINES
- LM2500

COMPONENTS
- CATE
- INSTRUMENTS
- COMM/IFF
- NAV/ELEC
- RADAR
- CSD/ROTATING ELEC.

TECHNOLOGY
- COMPOSITE REPAIR
- BEARINGS
- CALIBRATION
- HYDRAULICS
- **COMMON ATE**

EAST COAST TACAIR

NADEP JACKSONVILLE

AIRCRAFT
- P-3 **EA-6B, F-14**

ENGINES
- J52, F404 **TF34**

COMPONENTS
- ELECTRO-OPTICS
- ASW SYSTEMS
- RACKS/LAUNCHERS
- AIR REFUELING STORES
- ELECTRONIC WARFARE

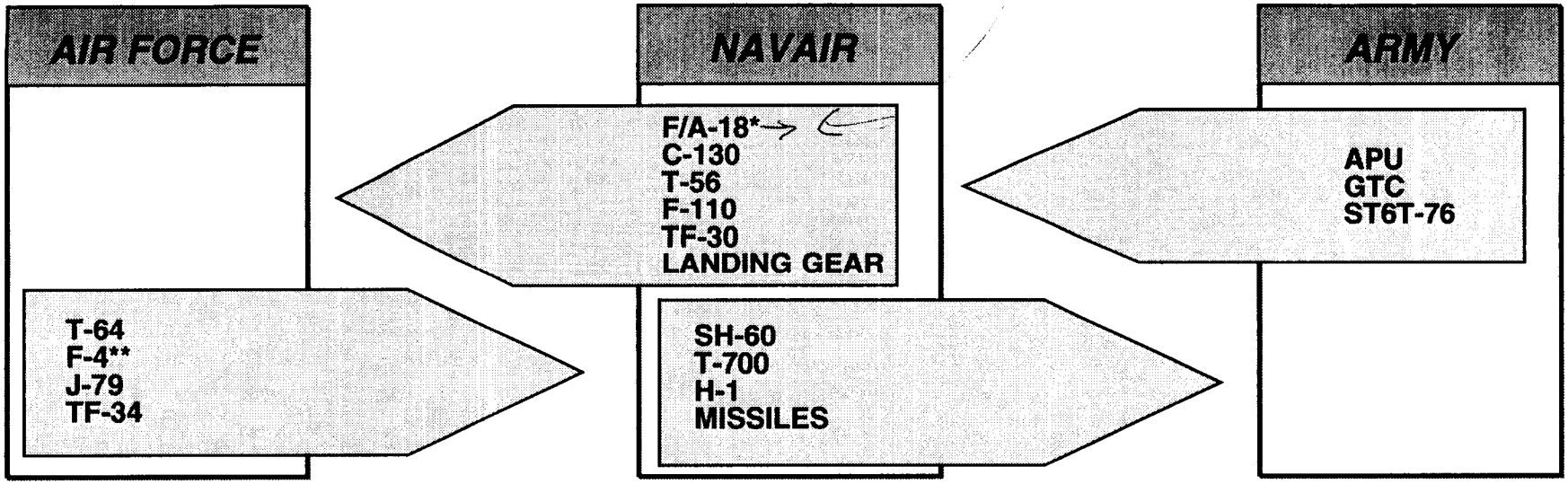
TECHNOLOGY
- EO/EW
- ENVIRONMENTAL

BRAC1

INTERSERVICE INITIATIVES

NAVAL AVIATION SYSTEMS TEAM

claims OSD decision to keep



✓ FY95 DoD APPROPRIATION ACT

✓ FY95 DoD AUTHORIZATION ACT (OVER $3M)

✓ 4 MAY 94 DEPSECDEF MEMO

* *STATUS - F-18 - OPTION NOT EXERCISED*

** *STATUS - F-4 - TO RETIRE VICE TRANSITIONING TO CHERRY POINT*

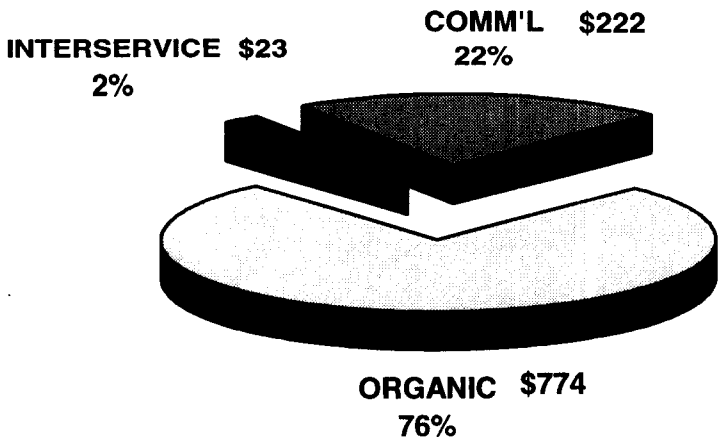
NLOC9

NAVAIR'S DM INTERSERVICING CONTRIBUTION

NAVAL AVIATION SYSTEMS TEAM

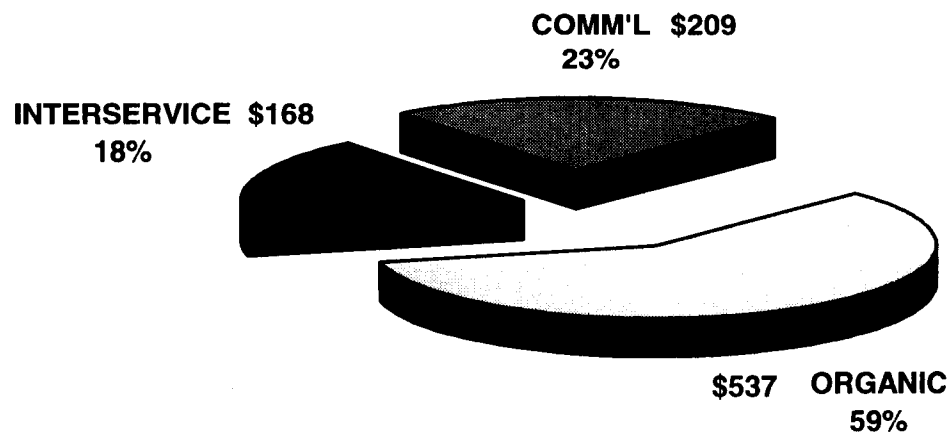
(O&M $M)

FY 90



TOTAL $1,019

FY 95



TOTAL $ 914

'99
*26% interserving

SOURCE: FY90 COL 90/91 PB; FY95 COL 96/96 OSD/OMB BUDGET

45-47% should be good for core

GEOPIE

Document Separator

COMPARABILITY ISSUES

- *COST COMPARABILITY HANDBOOK identified problem areas when preparing UNIT cost estimates.*
- *"Nothing" is free.*
- *Adjustment required when expenses are paid by external appropriations.*

  Engineering Design Support = "Free" to all Depots except Navy

  On-base health services = "Free" to Navy, Army, Marine

  Legal = "Free" to Air Force

  Impact Aid = "Free" to all services
- *WHEN COMPUTING UNIT COSTS, the Direct Vs. Indirect argument does not effect total costs, therefore not a consideration.*

(unit cost) Will not from (-2% between services

COMPARABILITY ISSUES

- *A NAVY DIRECT LABOR HOUR is NOT comparable to an AIR FORCE DIRECT LABOR HOUR.*
- *NAVY Budgets are based on "Norm" hours.*
  Norm hours are limited to planned wrench turning time.
- *NAVY INDIRECT includes:*

  First line supervision
  Shop clean-up
  Reprocessing of defective work
  Maintenance of shop equipment
  Calibration of shop equipment
  Material management
  Allowed time
  Training

COMPARABILITY ISSUES

- *AIR FORCE codes people as DIRECT or INDIRECT*
- *A blue collar Direct person will always be charged as direct unless an exception clocking is made.*
- *Total "direct" hours are prorated to products based on standard hours (norms).*
- *Audits give NAVY high marks in charging discipline.*
- *NAVY accounting system, NIFMS, received highest marks.*

UNIT COST AND RATE COMPARISON

	DIRECT LABOR	PROD OVHD	GEN & ADM OVHD	UNIT MATL	DIR LAB HRS (DLH)	UNIT PRICE	$/DLH
UNIT ABC	$20.00	$30.00	$15.00	$2,000	100	$8,500	$85.00
ASSUMPTIONS:							
PRODUCTIVITY INCREASE, DLH DECREASE	$20.00	$30.00	$15.00	$2,000	75	$6,875	$91.67
MATL PRICE DECREASE; DLH INCREASE	$20.00	$30.00	$15.00	$1,500	125	$9,625	$77.00
DLH DECREASE, P(OH) INCREASE	$20.00	$39.71	$15.00	$2,000	87	$8,500	$97.70
MATL PRICE INCREASE	$20.00	$30.00	$15.00	$2,500	100	$9,000	$90.00

NOTE: UNIT PRICE IS DETERMINED BY MULTIPLYING THE DIRECT LABOR, PRODUCTION OVERHEAD AND G&A BY THE DIRECT LABOR HOURS AND THEN ADDING THE MATERIAL PRICE.

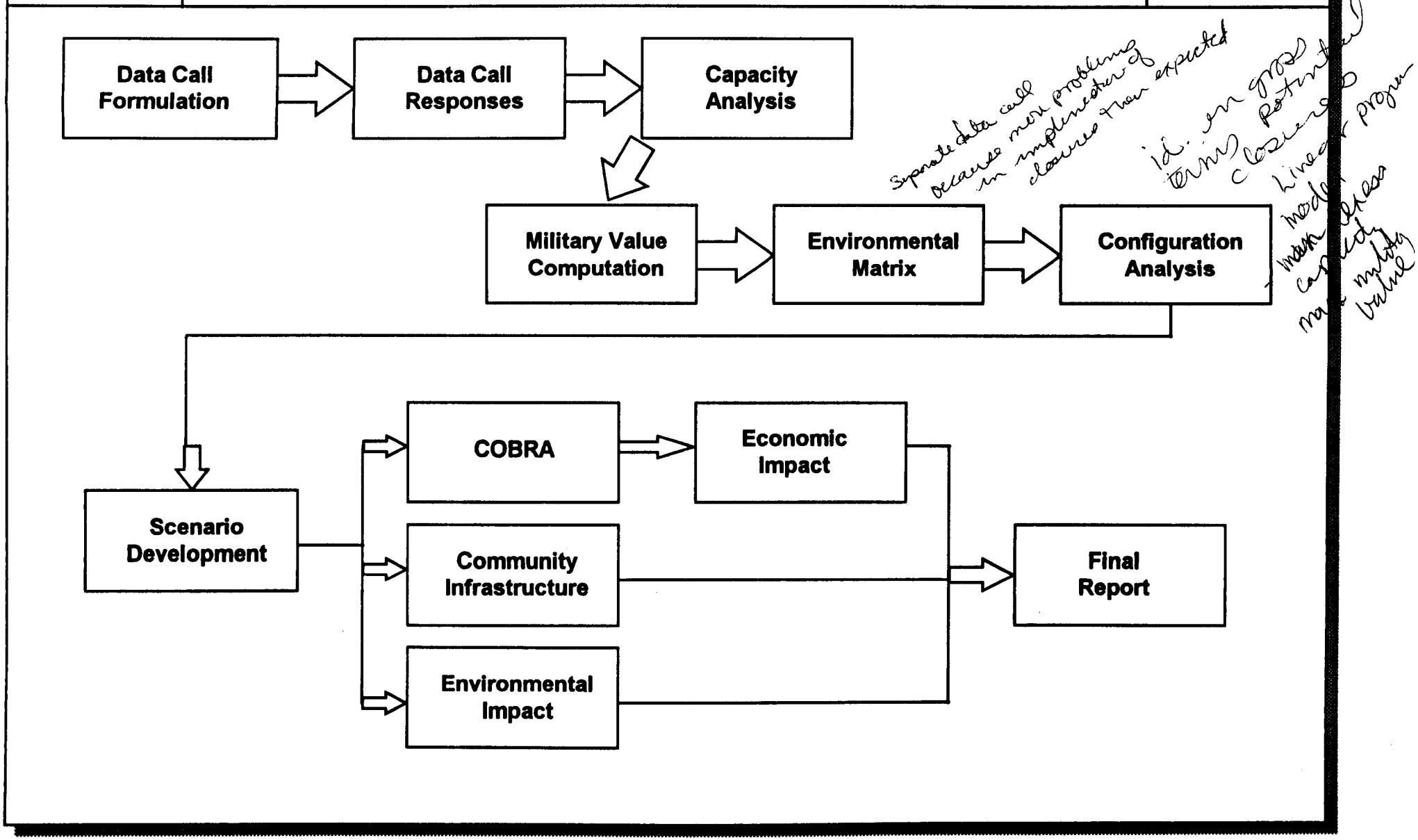
AGENDA

NAVAL AVIATION SYSTEMS TEAM

- BRAC-93 PRE-DECISIONAL PHASE
  - Capacity & Utilization Measurement
  - Econometric Analysis
  - Scenario Development
  - Economic Modeling (COBRA Input)
- BRAC-93 IMPLEMENTATION
  - Organizing for Closure
  - Process Development
  - Closure & Transition Schedules
- RELATED ISSUES
  - Joint Analysis
  - CORE Analysis

PRE-DECISIONAL PROCESS

NAVAL AVIATION SYSTEMS TEAM



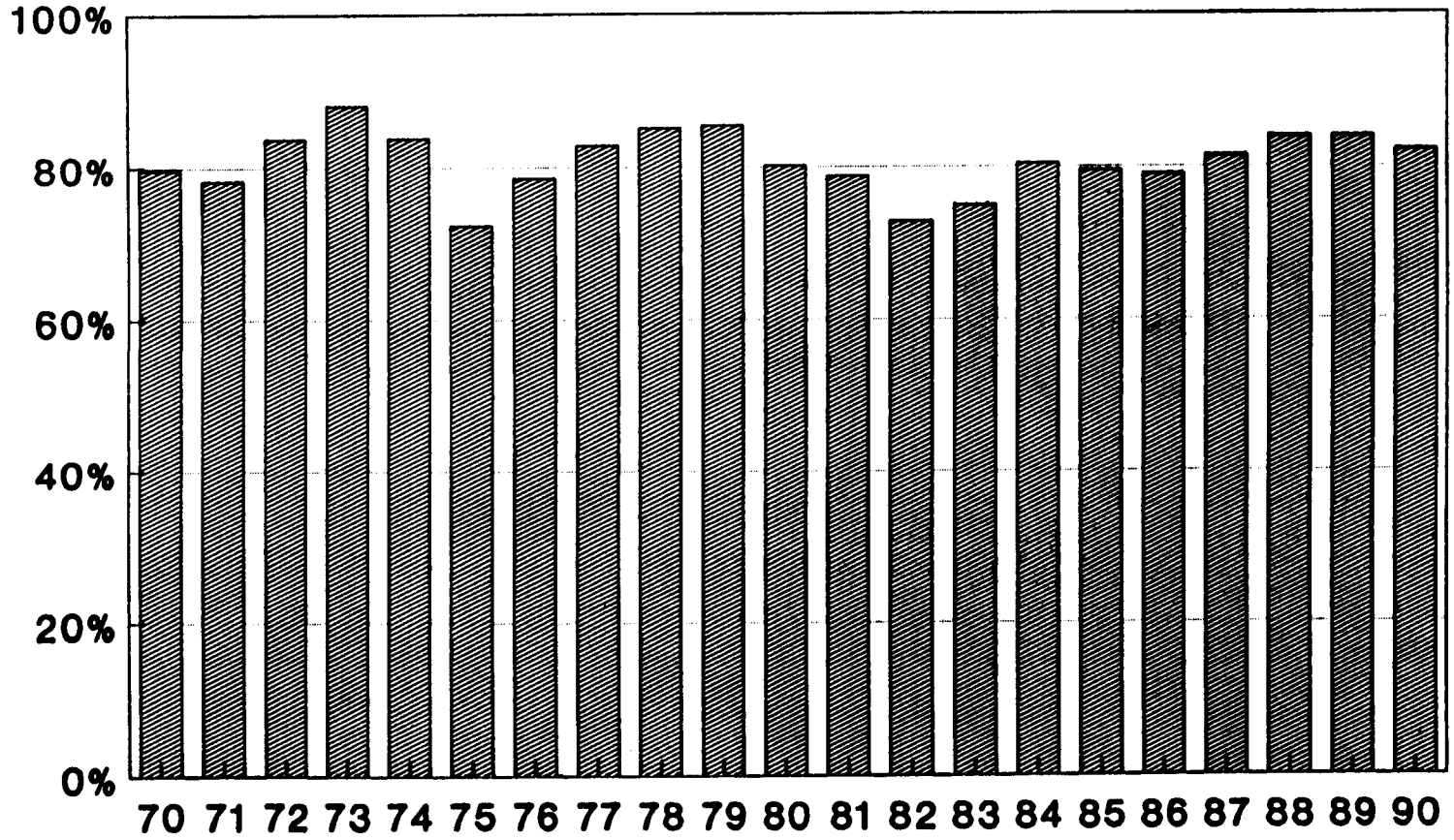
IMPORTANCE OF CAPACITY

NAVAL AVIATION SYSTEMS TEAM

"Since the existence of excess capacity is generally the primary reason to close bases, the effective execution of the capacity analysis is a critical step in the assessment process and must be done rigorously."

- Logistics Management Institute, 1989

Utilization of Total Industrial Manufacturing Capacity 1970-90



Source: The Federal Reserve Board

Capacity Working Group

MEASURING CAPACITY & UTILIZATION

NAVAL AVIATION SYSTEMS TEAM

- Uses of Capacity and Utilization
  - *Economic Indicators*
  - *Macro-economic measure of overall business activity*
- Definitions of Capacity and Utilization
  - *Capacity Utilization Rate (Federal Reserve Indexes, a statistical/economic 6 step process)*
  - *Actual Operations*
  - *Preferred Operations*
  - *Practical Capacity*
  - *Design Capacity*
  - *Effective Capacity*
  - *Actual Output*
- Determinants of Capacity
  - *Facilities*
  - *Products or Services*
  - *Processes*
  - *Human Considerations*
  - *Operations*
  - *External Forces*

TWO CAPACITY INDICATORS

NAVAL AVIATION SYSTEMS TEAM

- DoDInstruction 4151 Capacity
  - Snapshot in time
  - Current plant configuration
  - Constraining factors:
    - One shift operation
    - Facilities
    - Equipment
    - Configuration
    - Manpower
  - Short Term Assessment

"work position capacity"

- Maximum Potential Workload
  - Potential over time
  - Potential configuration based on workload mix
  - Constraining factors:
    - One shift operation
    - Facilities
  - 100% Utilization cannot realistically be achieved
  - Long Term Assessment

this definition developed through BRAC '93

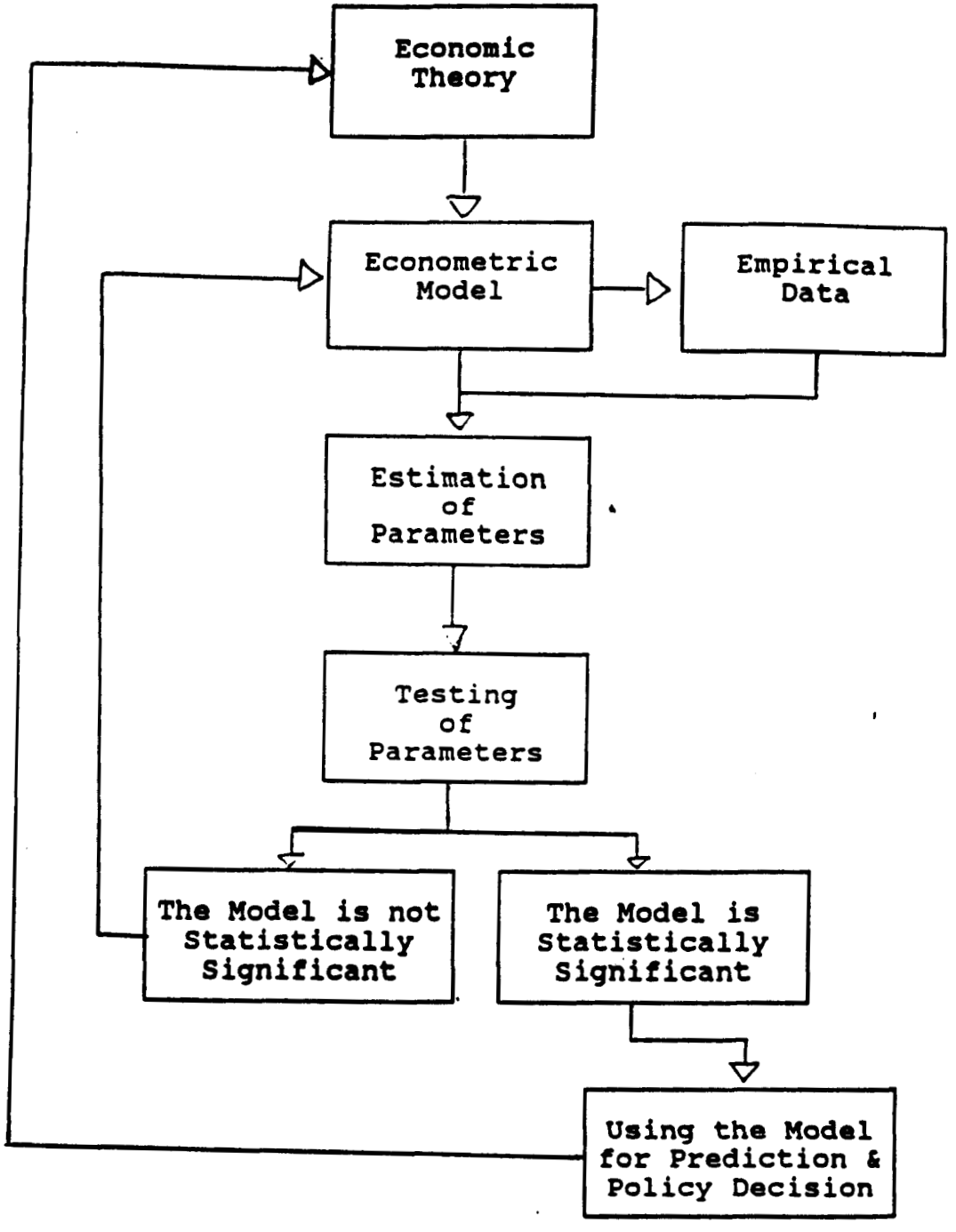
ECONOMETRIC TECHNIQUE

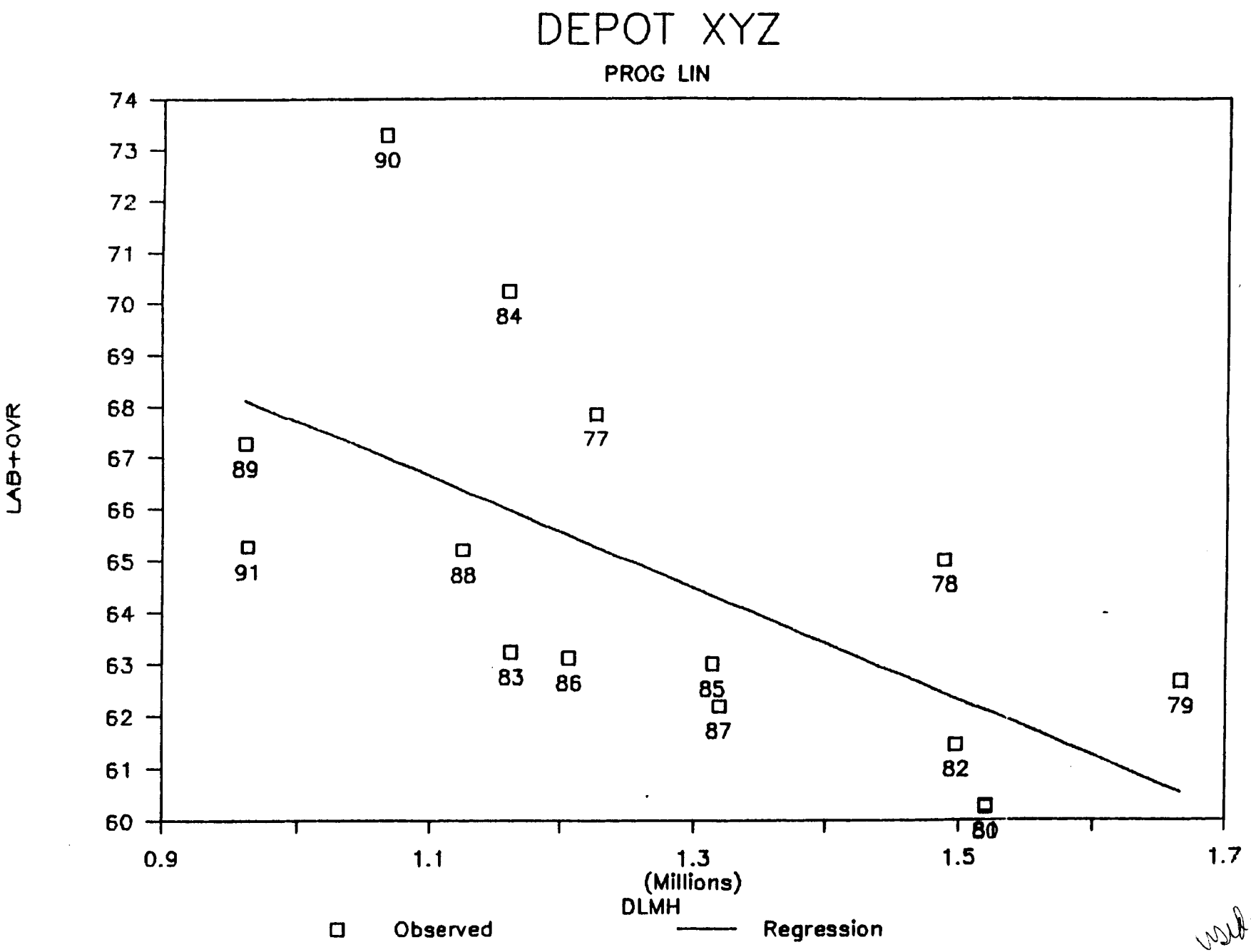
Goal

Quantify economies of scale.
Reproducible methodology.
Statistically sound.

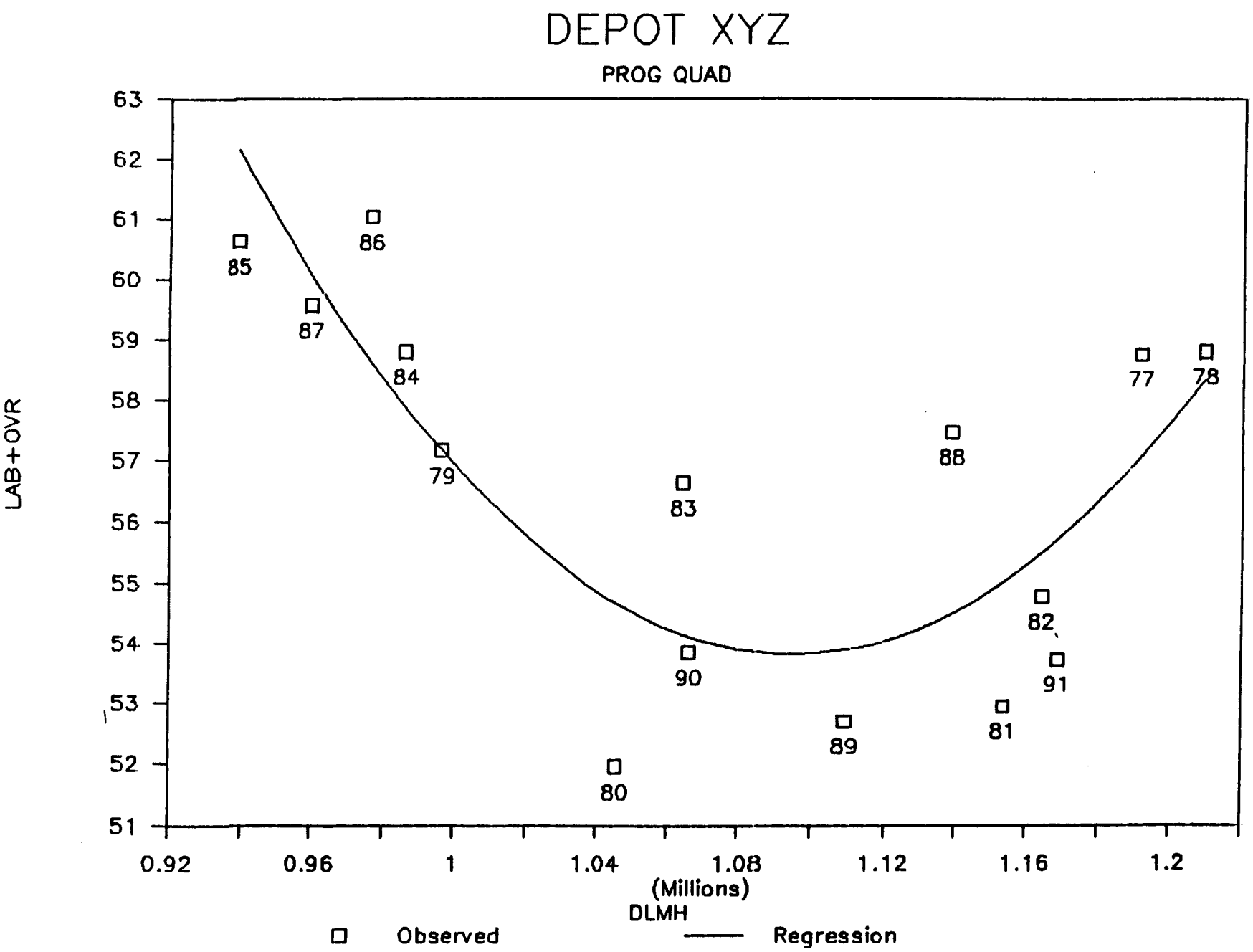
Approach

Statistical analysis of historical data.
Inflation adjust past costs.
Use Direct Labor Manhours as proxy for units produced.
Measure production volume in manhours.
Look for linear and quadratic relationships.


Economic Theory
Econometric Model
Empirical Data
Estimation of Parameters
Testing of Parameters
The Model is not Statistically Significant
The Model is Statistically Significant
Using the Model for Prediction & Policy Decision

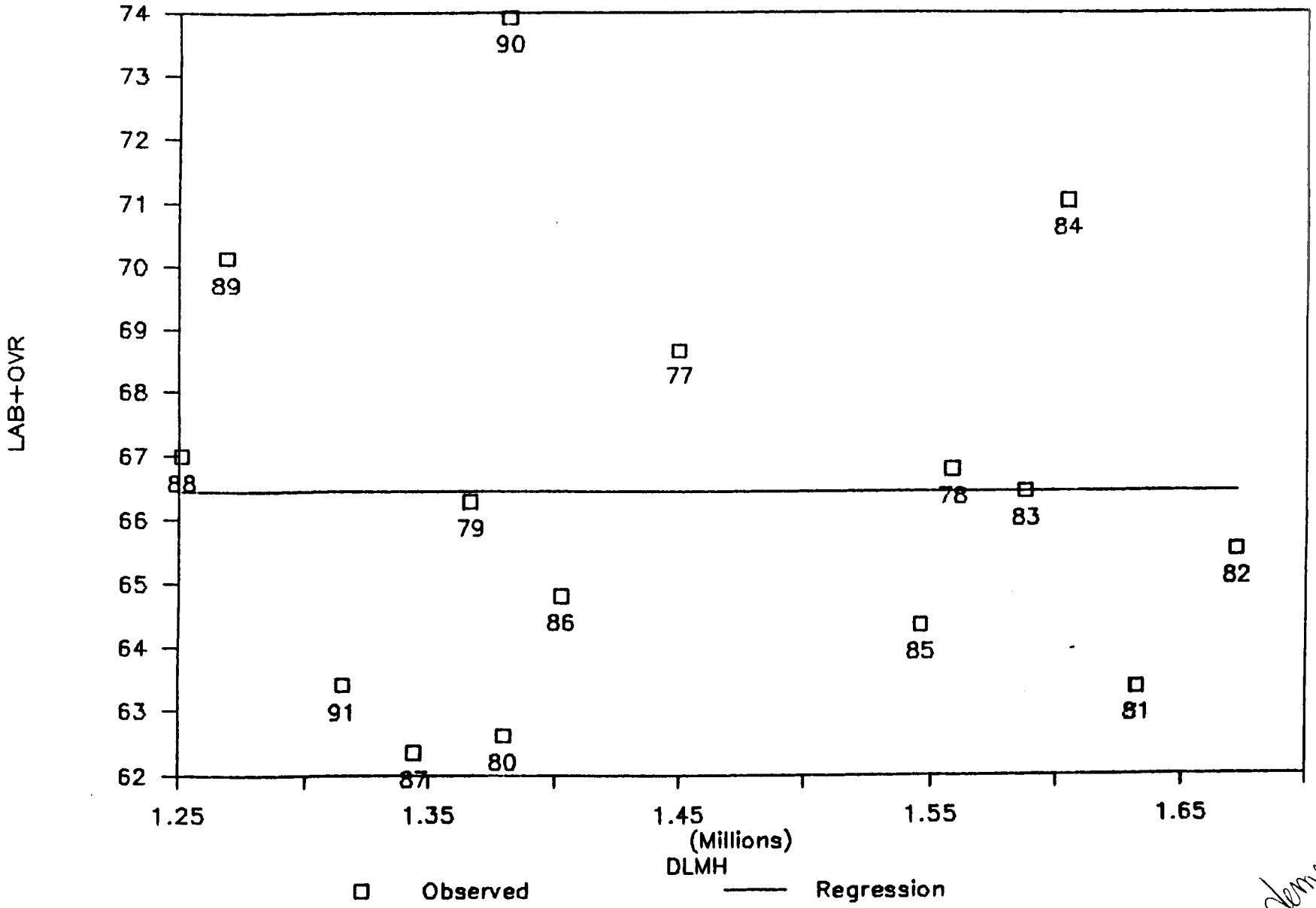


used to determine Δ's in additional cost for going dept


DEPOT XYZ
PROG QUAD
LAB+OVR
63
62
61
60
59
58
57
56
55
54
53
52
51
0.92
0.96
1
1.04
1.08
1.12
1.16
1.2
(Millions)
DLMH
85
86
87
84
79
83
90
80
89
88
81
82
91
77
78
Observed
Regression

DEPOT XYZ

PROG K



demonstrates that
X should be used rather
than a particular
year

Assumptions
Econometrics

- Cost Volume Relationship Changing Slowly
- Changes Remain Within Historical Norms
- Output Can Be Measured in Manhours
- Material Costs Ignored
- Transportation Costs Ignored
- Uniform Accounting
- Sufficient Data Available

SCENARIO DEVELOPMENT

NAVAL AVIATION SYSTEMS TEAM

- Identification
- Assumptions
- Mission Workload Realignment
- Facility Closure Requirements
- Navy Depot Economic Model

SCENARIO DEVELOPMENT

NAVAL AVIATION SYSTEMS TEAM

- Identification
  - Intent of scenario
  - Scope of scenario
- Assumptions
  - Time period of closure or realignment
  - Specific destinations for mission workloads
  - Data Sources (for rates, workload, etc.)

SCENARIO DEVELOPMENT

NAVAL AVIATION SYSTEMS TEAM

- Facility Closure Requirements
  - Shutdown
  - Caretaker
- Mission Workload Realignment
  - Workload Re-distribution Plan (rationale)
  - Workload Re-allocation
  - Workload Transition Plan (phasing)
  - Environmental
  - Special/Other
- Navy Depot Economic Model

Workload Re-distribution Plan

NAVAL AVIATION SYSTEMS TEAM

24 May 1993

SCENARIO NUMBER: X

DEPOTS: NADEPs Alameda, XXX & XXX

CLOSING DEPOT	T/M/S	GAINING DEPOT	RATIONALE
Alameda	P-3		NADEP XXX was assigned as the source of repair for this aircraft because they are currently a designated repair point for all type models of the P-3 aircraft. Current open capacity allows the additional workload without adversely impacting other workload. The P-3 and EP-3 aircraft are core workload efforts.
Alameda	S-3		NADEP XXX was assigned as the source of repair on the S-3 aircraft due to the fact that this platform is core workload. The capacity at XXX. is currently available to support the additional workload associated with the airframe without adversely impacting the currently workload or mission.
Alameda	A-6/ EA-6		NADEP XXX was assigned as the source of repair on these aircraft because (1) the other depot with A-6 rework capability is a potential closure (on this scenario), (2) XXX has experience on both types of structures - metals and composites, and (3) open capacity allows this workload without impacting the facility size

NAVAL AVIATION SYSTEMS TEAM

Workload Transition Plan

SCENARIO No.: _____ DATE:

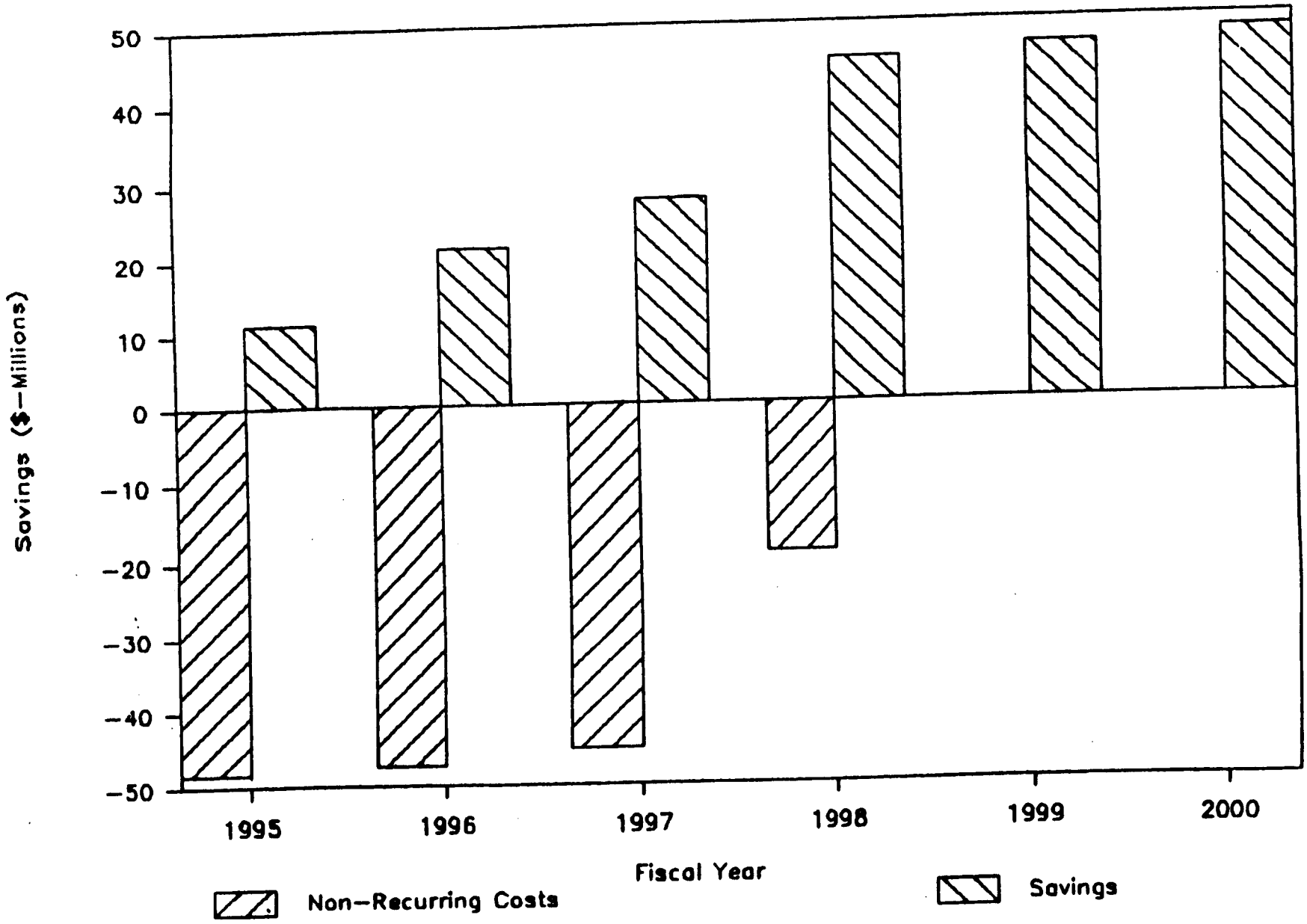
DEPOT:

ORIGINATING DRP AND
TRANSITION SITE CODE:
A = ALAMEDA, B = NORFOLK, C = NORTH ISLAND,
E = JACKSONVILLE, F = CHERRY POINT, G = PENSACOLA,
J = AIR FORCE, I = ARMY, M = COMMERCIAL

			TRANSITION PLAN				
ORG DRP	SYSTEM	TRANS SITE	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999

ECONOMIC MODEL

Costs and Savings for Closing Depot XYZ



RECURRING COSTS
Major Influences

- Labor and Overhead Rates
  Regional/NADEP Differences

- Overhead Savings With Consolidation
  Some G&A Expenses NOT Transferred

- Economies of Scale
  Rates Change With Workload Volume

NON-RECURRING COSTS

- Severence Pay - Salaries, Yrs Service and Age
- Personnel Relocation - TDY, Moving, Residence
- Recruitment - Cost of New Hires at Gaining NADEP
- Training/Productivity Lag - Half of Salary During Training
- Equipment Relocation - Cost Ton/Mile + Packing Cost/Ton
- Realignment Coordination - Team Trips per Line Moved
- Cost of Disruption - Percentage of Annual Labor Costs
- MILCON - New Requirements at Gaining Sites
- Facility/Equipment Shutdown Costs - Mothball Cost by SqFt
- Transport NIF Inventory - Fixed Amount Spread Over Time
- Other

ECONOMIC MODEL ANALYSIS
CORPORATE SUMMARY

Option/Alternative
DEMONSTRATION CLOSE

$ 000 = cash inflow
$(000) = cash outflow

10-Nov-93
07:58 AM

Discount Rate/Required Rate of Return 10.00%

CASH INFLOWS	YEAR 1995	YEAR 1996	YEAR 1997	YEAR 1998	YEAR 1999	YEAR 2000
Recurring						
1. Economies of Scale (from econometric model)	2,640,030	4,449,562	5,463,395	7,211,116	7,352,671	7,497,371
2. Decreased Net Operating Costs (closure & reposture)	37,484,298	74,830,427	102,244,455	176,439,738	182,791,568	189,372,065
Non-Recurring						
3. Milcon Avoidance	0	0	0	0	0	0
Cash Inflow Subtotal	$40,124,328	$79,279,989	$107,707,850	$183,650,854	$190,144,239	$196,869,436

CASH OUTFLOWS	YEAR 1995	YEAR 1996	YEAR 1997	YEAR 1998	YEAR 1999	YEAR 2000
Recurring						
1. Diseconomies of scale (from econometric model)	0	0	0	0	0	0
2. Increased Net Operating Costs	(31,104,054)	(62,657,225)	(87,693,729)	(151,315,484)	(156,762,841)	(162,406,304)
Non-Recurring						
3. Severance Pay	(6,186,670)	(7,145,983)	(7,957,002)	(11,817,877)	0	0
4. Personnel Relocation	(1,358,578)	(1,598,881)	(1,782,647)	(2,644,424)	0	0
5. Recruitment (new hires)	(247,990)	(231,171)	(160,352)	(461,986)	0	0
6. Training/Productivity Lag (Gaining NADEP)	(2,525,002)	(2,490,849)	(1,681,244)	(4,878,388)	0	0
7. Equipment Relocation	(11,990,415)	(12,470,032)	(12,968,833)	0	0	0
8. Realign Coord (TDY & Trvl)	(160,643)	0	0	0	0	0
9. Cost of Disruption	(14,021,370)	(10,496,123)	(6,434,662)	0	0	0
10. MILCON	0	0	0	0	0	0
11. Facility/equipment shutdown costs	(894,235)	(930,004)	(967,204)	0	0	0
12. Transport NIF Inventory	(322,000)	(334,880)	(348,275)	0	0	0
13. Other Costs	(13,022,667)	(13,543,573)	(14,085,316)	0	0	0
Cash Outflow Subtotal	($81,833,623)	($111,898,721)	($134,079,264)	($171,118,160)	($156,762,841)	($162,406,304
Net Cash Flows (inflow + outflow)	($41,709,295)	($32,618,732)	($26,371,414)	$12,532,694	$33,381,398	$34,463,132
Cumulative savings/(losses)	($41,709,295)	($74,328,028)	($100,699,442)	($88,166,748)	($54,785,350)	($20,322,218

AGQ	$13,673,471
Rate Of Return	13.2%
Years Payback Period	9

ECONOMIC MODEL ANALYSIS
CORPORATE SUMMARY

Option/Alternative
DEMONSTRATION CLOSE

$ 000 = cash inflow
$(000) = cash outflow

10-Nov-93
07:58 AM

	YEAR 1995	YEAR 1996	YEAR 1997	YEAR 1998	YEAR 1999	YEAR 2000
Cash Inflows						
1. Decreased Operating Costs	$9,020,274	$16,622,764	$20,014,121	$32,335,370	$33,381,398	$34,463,132
2. Milcon Avoidance	$0	$0	$0	$0	$0	$0
Total Cash Inflows	$9,020,274	$16,622,764	$20,014,121	$32,335,370	$33,381,398	$34,463,132
Cash Outflows						
1. Increased Operating Costs	$0	$0	$0	$0	$0	$0
2. Non Recurring Up Front Costs	($50,729,569)	($49,241,496)	($46,385,535)	($19,802,676)	$0	$0
Total Cash Outflows	($50,729,569)	($49,241,496)	($46,385,535)	($19,802,676)	$0	$0
Net Cash Flows (inflow + outflow)	($41,709,295)	($32,618,732)	($26,371,414)	$12,532,694	$33,381,398	$34,463,132
Cumulative savings/(losses)	($41,709,295)	($74,328,028)	($100,699,442)	($88,166,748)	($54,785,350)	($20,322,218

Total Net Present Value	$13,673,471
Rate Of Return	13.2%
Years Payback Period	9

Non-Recurring Up Front Costs Summary

3. Severance Pay	(33,107,532)
4. Personnel Relocation	(7,384,531)
5. Recruitment (new hires)	(1,101,499)
6. Training/Productivity Lag (Gaining NADEP)	(11,575,483)
7. Equipment Relocation	(37,429,279)
8. Realign Coord (TDY & Trvl)	(160,643)
9. Cost of Disruption	(30,952,155)
10. MILCON	0
11. Facility/equipment shutdown costs	(2,791,443)
12. Transport NIF Inventory	(1,005,155)
13. Other Costs	(40,651,556)
Total	(166,159,277)

ECONOMIC MODEL ALGORITHMS AND ASSUMPTIONS

The following describes the algorithms used internally in the Navy's Economic Model to calculate various costs. Unless otherwise stated, the algorithms shown are for the first year with subsequent years calculated similarly and adjusted for inflation. All of these algorithms can be modified as necessary.

Non-Recurring Costs

Severance Pay:

No. of People * Yrs. Service <= 10 * Average Weekly Salary
+ No. of People * Yrs. Service > 10 * 2 * Avg. Weekly Salary
+ No. of people * 10% of above for each year over age forty

Note: The above is not to exceed one years salary. This is calculated separately for each personnel category using average values for the relevant parameters and summed to get the final result.

Personnel Relocation Cost:

Per diem rate for employees is set at $87.33, the average rate for the depots considered. The per diem for spouses and children 12 or over is 75% of that rate, and for children under 12 it is 50%.

Assume the average relocation is a family of four for a distance of 2,000 miles. Mileage allowance is $0.20 per mile. Moving cost per hundred weight is $90, storage per hundred weight is $2.25.

The costs per employee add up as follows:

$0.20 per mile * 2000 miles =	$ 400
Per diem at 350 miles/day, max 8 days =	$ 1,572
House hunting trip (10 days) =	$ 3,420
Temp. quarters subsistence (60 days max) =	$10,371
Misc. expenses	$ 700
Sale of residence, Max. =	$19,249
Purchase of residence, Max. =	$ 9,624
Movement of household goods, 18K lbs. =	$16,200
Storage of household goods, 3 Mon. Max. =	$ 1,215
Total =	$62,751

Added to the above is the home owner's assistance program cost less sale of residence allowance for GS-13s and above based upon 25.2% of the average home market value.

Recruitment Cost:

Number General Schedule (White Collar) Hires * $644 +
The Number Wage Grade (Blue Collar) Hires * $442

Training/Productivity Lag:

Number of hires * 1/2 Monthly Salary * Months of Training

Note: Months of training assumed are 7 months for blue collar and 5 months for white collar hires.

Equipment Relocation:

Assume 100K short tons of equipment moving times $0.05 per ton mile times the average number of miles to the other depots. The teardown, crating, uncrating and reassembly cost is assumed to be $258.80 per ton. The total cost calculates as follows:

100K Tons * $0.05 per ton mile * Avg. miles to other depots + 100K Tons * $258.80 per ton

Note: The average miles to the remaining depots varies from 1,171 miles to 2,042 miles. This gives totals ranging between $31.7M to $36.1M. These totals are then divided equally across each of the three years allowed for closure. The years after the first are adjusted for inflation.

Realignment Coordination:

The cost to transfer one product line is assumed to involve one team of four persons and five total trips. The average round trip airfare to the other depots varies from $416 to $628. The average per diem rate over all the depots is $87 per day. The cost per product line calculates as:

(Avg. Airfare + 5 Days per diem) * 5 Trips * 4 Employees

Note: The above calculates to between $16,893 and $21,293 per product line depending upon depot. This figure is then multiplied by the number of product lines repostured.

Cost of Disruption:

This is assumed to be 25% of the annual labor costs of a closing facility, and 8% of the labor cost of the workload out from a facility losing work in a reposturing.

MILCON:

The cost of MILCON required to handle new workload at gaining facilities is assumed zero by direction.

Facility/Equipment Shutdown Costs:

The total cost is assumed to be $1.13 times the square feet of the product lines transferred out divided equally over the three years allowed for closure. The second and subsequent years are adjusted for inflation.

Transport NIF Inventory:

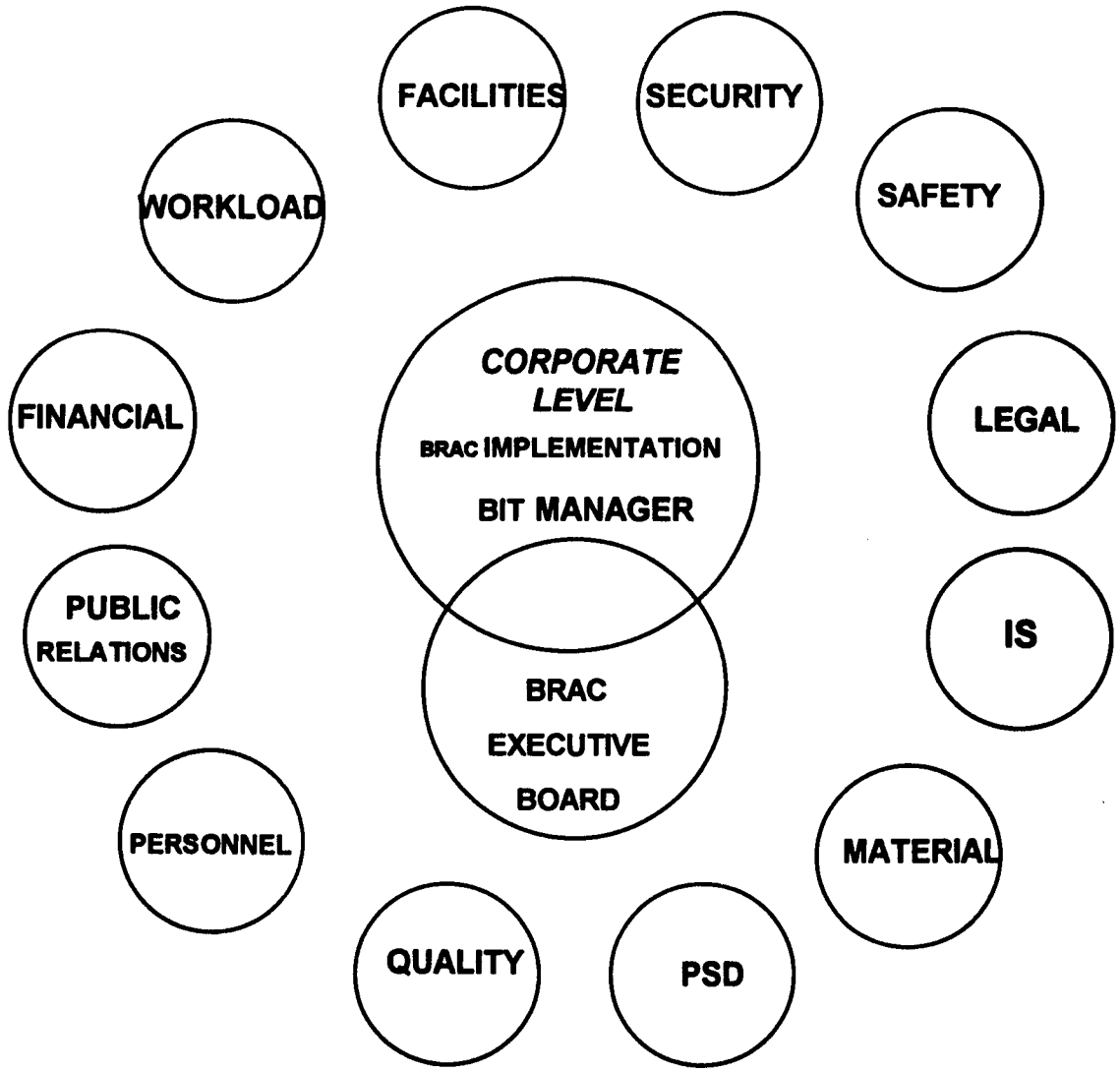
A total cost of $966,000 is assumed divided equally over the three years allowed for closure. The second and subsequent years are adjusted for inflation.

Recurring Costs

The percentage of General & Administrative expenses not transferred with the workload to the gaining depot from the losing depot is assumed to be 64.76%.

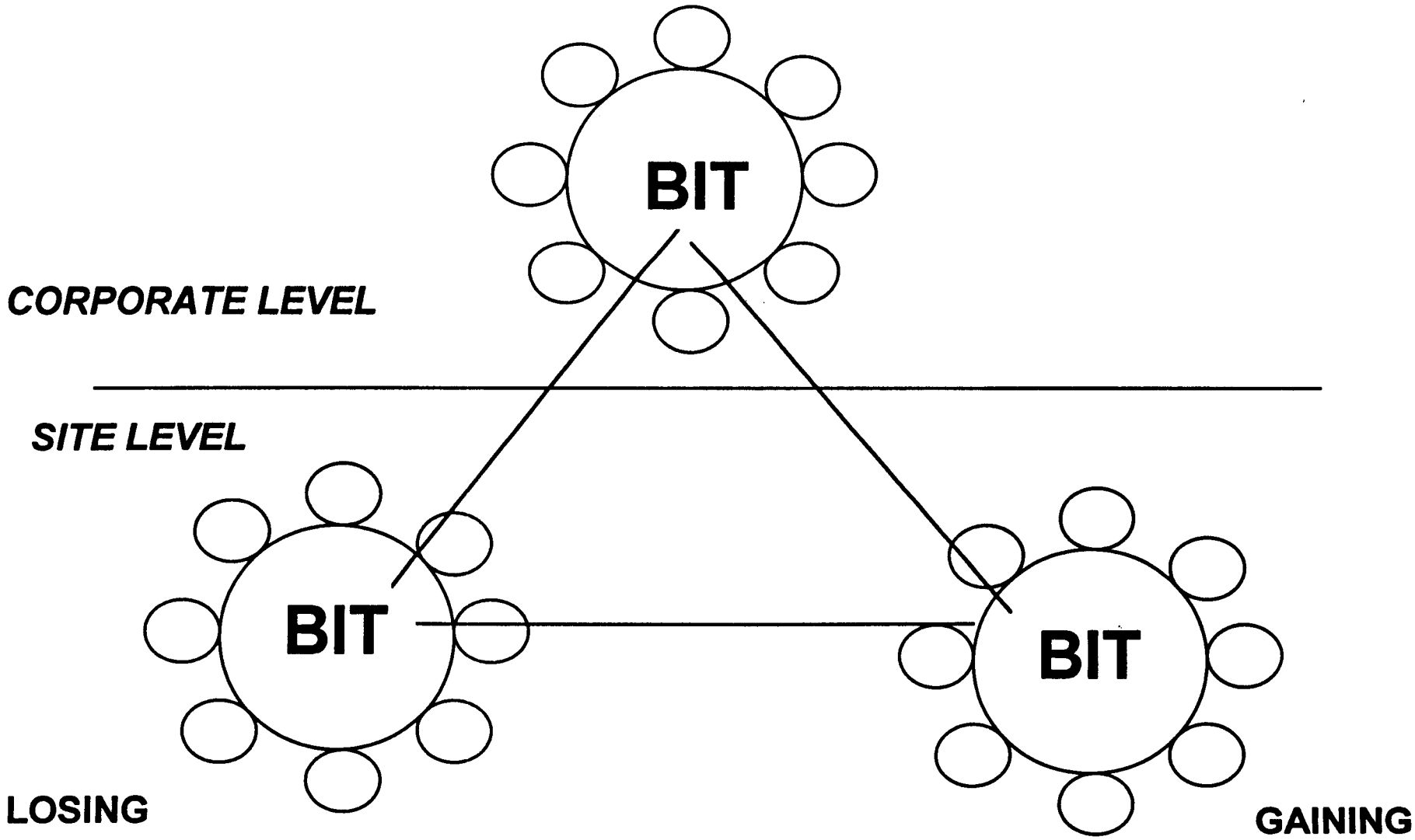
ORGANIZING for CLOSURE

NAVAL AVIATION SYSTEMS TEAM



ORGANIZING FOR CLOSURE

NAVAL AVIATION SYSTEMS TEAM



BACKGROUND

NAVAL AVIATION SYSTEMS TEAM

- BRAC-93 Closes 3 NADEPs
  - Alameda
  - Pensacola
  - Norfolk
- Closing actions must be completed within 6 years
  - Alameda schedule compatible with N.A.S.
  - Pensacola schedule driven by CNET
  - Norfolk schedule coordinated with RMC
- BRAC Requirement
  - Closing of facilities
  - Realigning of mission workloads

BRAC IMPLEMENTATION ACTIONS

NAVAL AVIATION SYSTEMS TEAM

- MAR 93 AIR-04D Established
  - Select a Program Manager/Deputy
  - Formalize position in NAVAIR Structure
- APR 93 BRAC Depot Advisory Group
  - Put together a team of experts
  - Define scope of project
  - Define organizational requirements
- MAY 93 BRAC Process Specification
  - Define all processes, functions, tasks
  - Organize all processes, functions, tasks (WBS)
  - Schedule all processes, functions, tasks
- JUN 93 BRAC Implementation Teams Formed
  - Virtual organization
  - Site and Headquarters levels
  - Assign responsibilities
  - Names and Phone Nrs. in all WBS categories

CLOSURE SCHEDULE

NAVAL AVIATION SYSTEMS TEAM

NADEP	*CEASE PRIMARY MISSION OPERATIONS*	*CLOSURE IMPLEMENTED*
PENSACOLA	SEP 95	MAR 96
NORFOLK	SEP 96	MAR 97
ALAMEDA	SEP 96	MAR 97

CEASE PRIMARY MISSION OPERATIONS - Date on which all productive workload has been transitioned to other locations, no direct work-in-process is left in the plant, and there is no longer a requirement to be a DBOF activity.

CLOSURE IMPLEMENTED - The date which the NADEP officially turns the facility over to the Host Station or NAVFAC.

EXECUTIVE SUMMARY

NAVAL AVIATION SYSTEMS TEAM

OBJECTIVES

* MAINTAIN FLEET SUPPORT
* ACHIEVE NADEP OPERATIONAL AND FACILITY CLOSURES ACCORDING TO BASE CLOSURE ACT II

STATUS

* PENSACOLA AIRCRAFT AND COMPONENT TRANSITIONS COMPLETE EXCEPT FOR DYNAMIC COMPONENTS AND ROTOR BLADE DET
* WORK AROUNDS/STOP GAP MEASURES AT NORFOLK AND ALAMEDA
* CONTINUOUS TRANSITION PLANNING AND PROCESS DEVELOPMENT

CHALLENGES/AREAS OF CONCERN

* INADEQUATE/CHANGING FUNDING PROFILE
* BACK UP DEPOTS FOR COMMERCIAL COMPONENTS
* HIGH ATTRITION/SKILL IMBALANCES AT CLOSING DEPOTS
* HIRING SKILLED PERSONNEL AT GAINING DEPOTS

WORKLOAD TRANSITION

NAVAL AVIATION SYSTEMS TEAM

AIRFRAMES

* 8 TYPE-MODEL PRODUCT LINES TRANSITIONING
  * VIRTUAL TRANSITION/STOP GAP MEASURES
  * MINIMAL PREDICTED FLEET IMPACT
  * FLEXIBLE SCHEDULE

ENGINES

* 3 PRODUCT LINES TRANSITIONING
  * FLEXIBLE SCHEDULE
  * ACHIEVABLE/MANAGEABLE
  * MINIMAL PREDICTED FLEET IMPACT

COMPONENTS

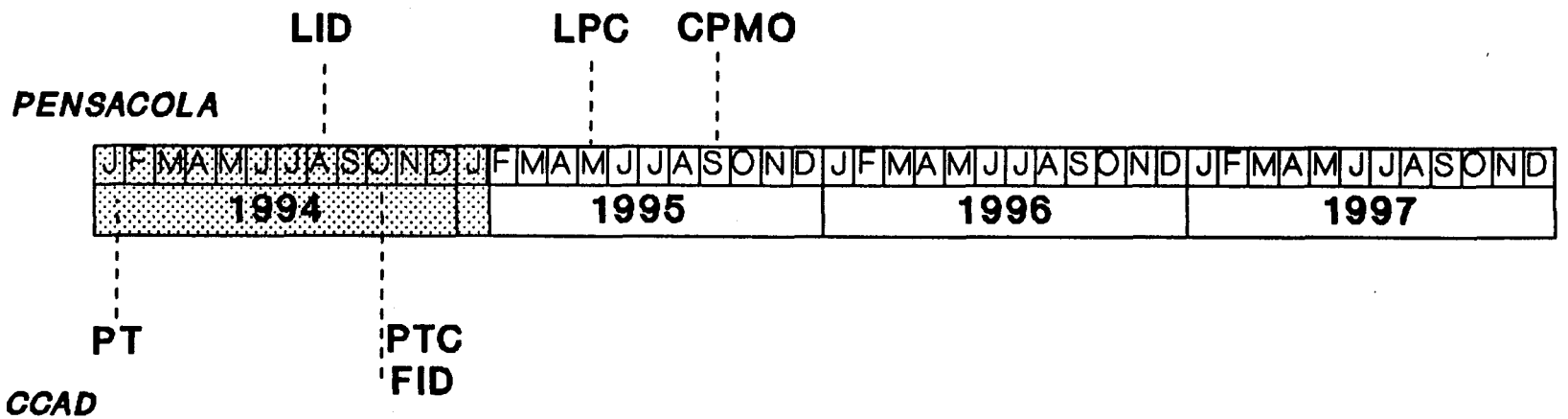
* APPROX 21,095 CAPABLE (ACTIVE/INACTIVE) PRODUCTS TRANSITIONING AT CLOSING SITES
  * HIGH VOLUME
  * BROAD SCOPE
  * COMPLEX MANAGEMENT PROCESS
  * COMPLEX TECHNICAL REQUIREMENT
  * POTENTIAL FLEET IMPACT

NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

SH-60B



PROTOTYPE BUNO 161557
COMPLETED 10/7/94

FID-BUNO 163907
INDUCTION DATE 10/18/94
10% COMPLETED
EST. COMPLETION DATE 4/6/95

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

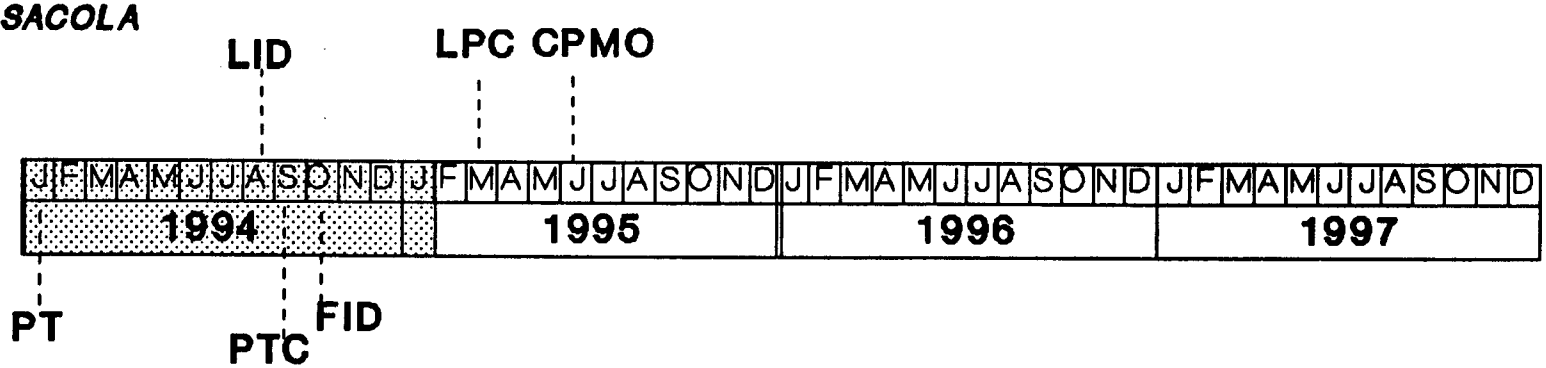
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

AH-1W

PENSACOLA



CCAD

PROTOTYPE BUNO 160113
COMPLETED 9/12/94
FID-BUNO 162542
INDUCTION DATE 10/20/94
10% COMPLETED
EST. COMPLETION DATE 4/10/95

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

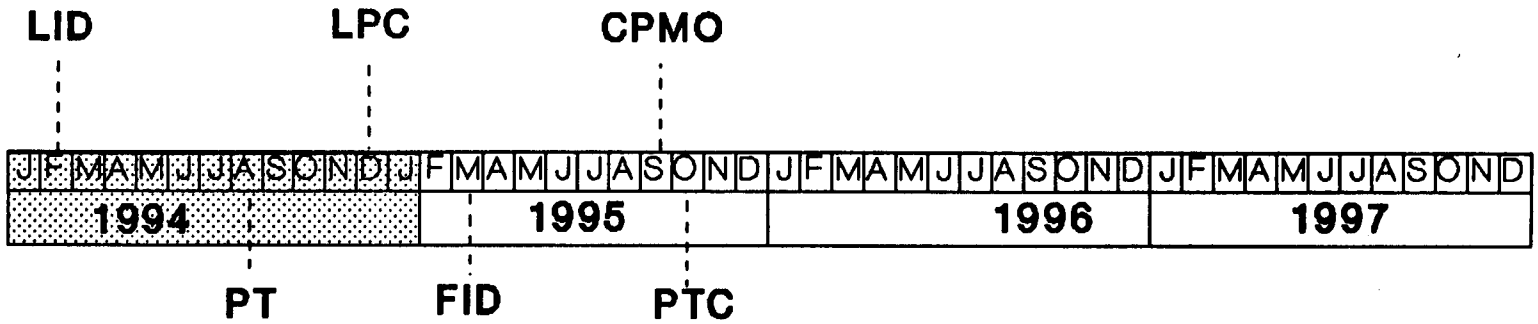
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

RH-53D

PENSACOLA



CHERRY POINT

PROTOTYPE BUNO 158749
INDUCTED 8/12/94
EST. COMPLETION DATE 10/11/95
45% COMPLETE

FID-BUNO UNKNOWN
INDUCTION DATE 3/8/95
EST. COMPLETION DATE 4/29/96

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

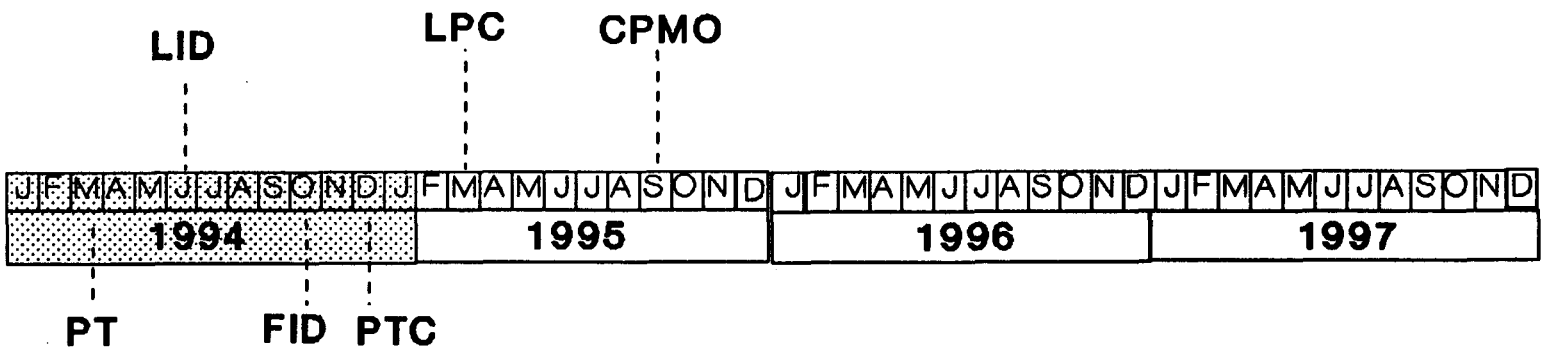
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

CH-53D

PENSACOLA



CHERRY POINT

PROTOTYPE BUNO 157170
- INDUCTED 3/9/94
- EST. COMPLETION DATE 12/12/94
- 90% COMPLETE

FID-BUNO 157155
- INDUCTION DATE 10/17/94
- 10% COMPLETED
- EST. COMPLETION DATE 7/12/95

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

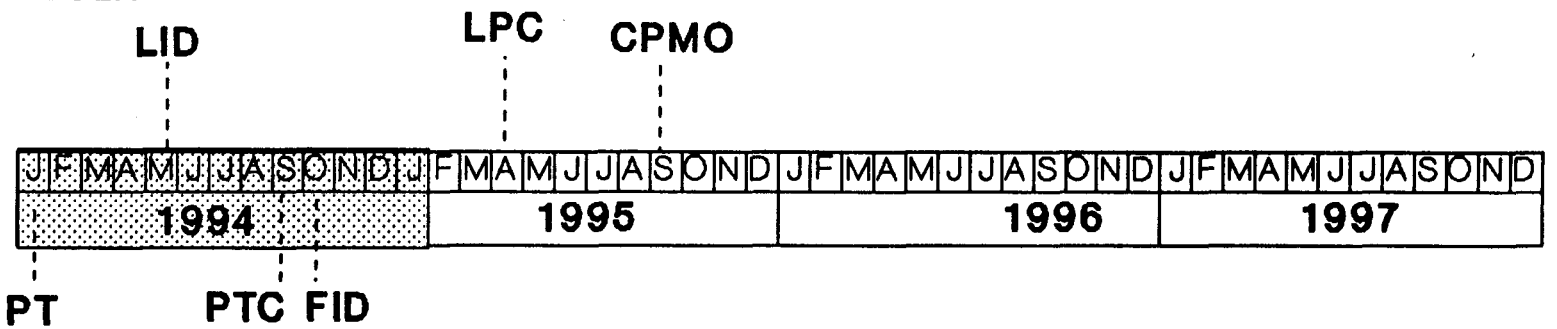
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

CH-53E

PENSACOLA



CHERRY POINT

PROTOTYPE BUNO 162521
INDUCTED 1/11/94
COMPLETED 9/21/94
FID-BUNO 162492
INDUCTION DATE 10/5/94
15% COMPLETED
EST. COMPLETION DATE 7/11/95

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETE
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

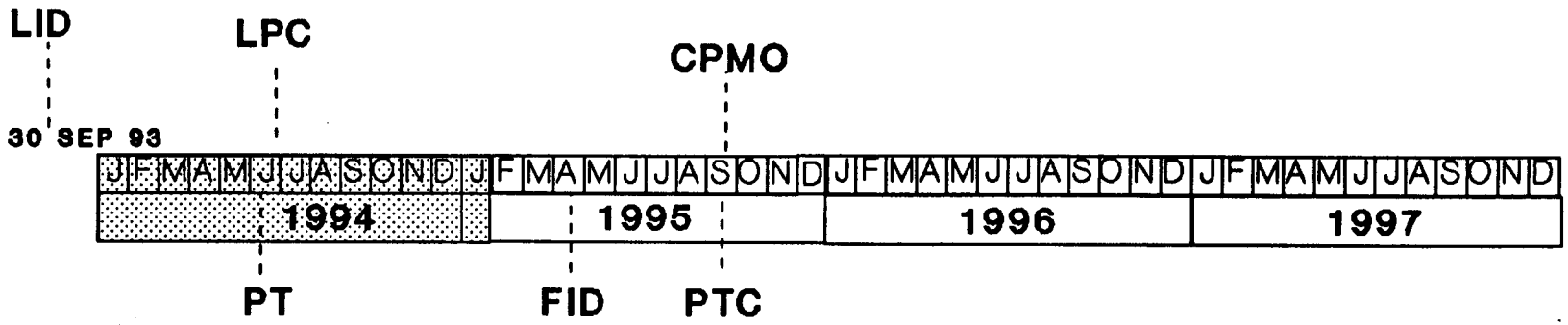
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

MH-53E

PENSACOLA



CHERRY POINT

PROTOTYPE BUNO 159409
INDUCTED 6/29/94
EST. COMPLETION DATE 9/11/95
FID-BUNO UNKNOWN
INDUCTION DATE 3RD QTR 95
EST. COMPLETION DATE N/A

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

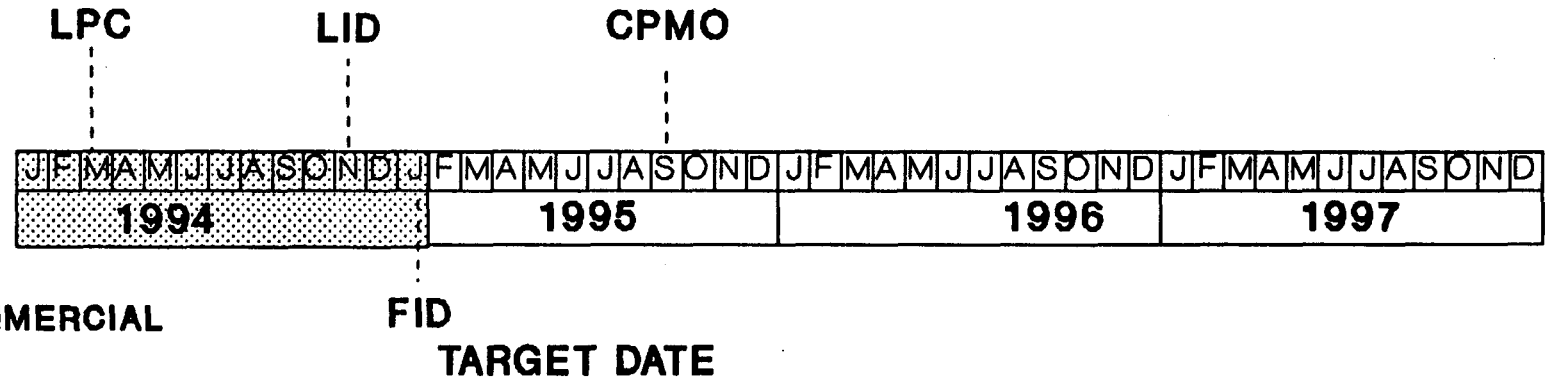
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

H-3

PENSACOLA



AWARDED 11/9/94
PEMCO AEROFLEX INCORP.
FID-BUNO UNKNOWN
INDUCTION DATE 2ND QTR 95
EST. COMPLETION DATE UNKNOWN

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

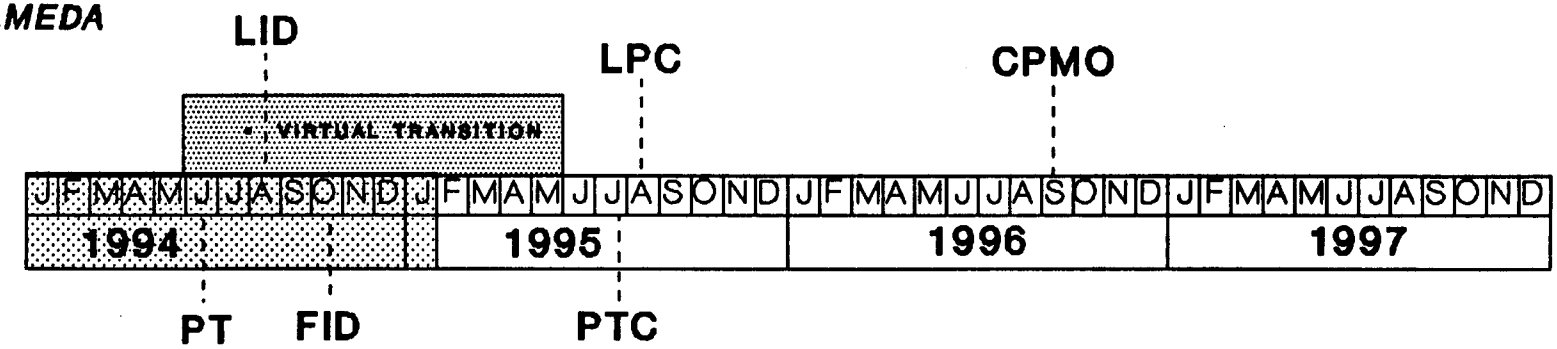
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

S-3B

ALAMEDA



NORTH ISLAND

* ACFT are being worked at Alameda

PROTOTYPE BUNO 159409
INDUCTED 6/22/94
EST. COMPLETION DATE 7/15/95

FID-BUNO 159751
INDUCTION DATE 10/14/94
50% COMPLETED
EST. COMPLETION DATE 10/14/95

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

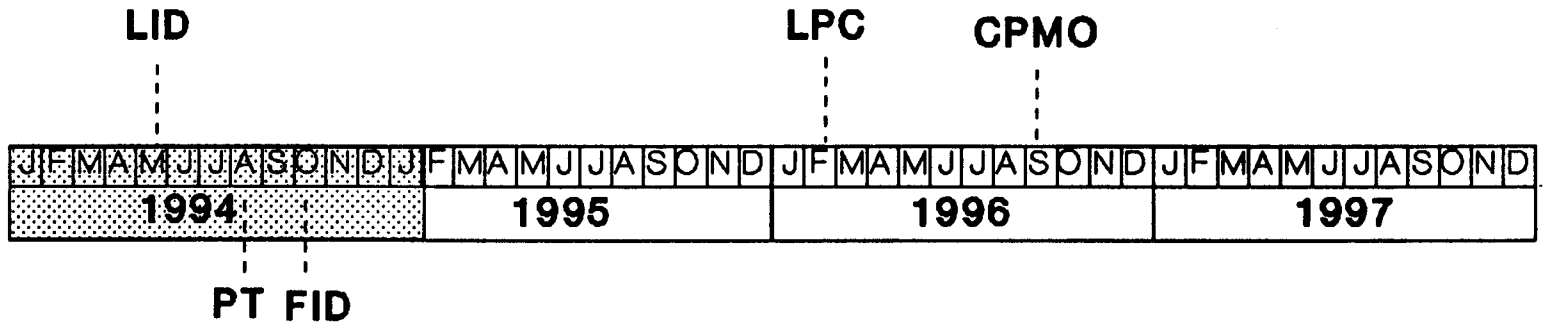
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

EP-3 ARIES

ALAMEDA



JACKSONVILLE

PROTOTYPE SCHEDULED AT JAX 2ND QTR FY95

FID-BUNO UNKNOWN
INDUCTION DATE 4TH QTR 95
EST. COMPLETION DATE UNKNOWN

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

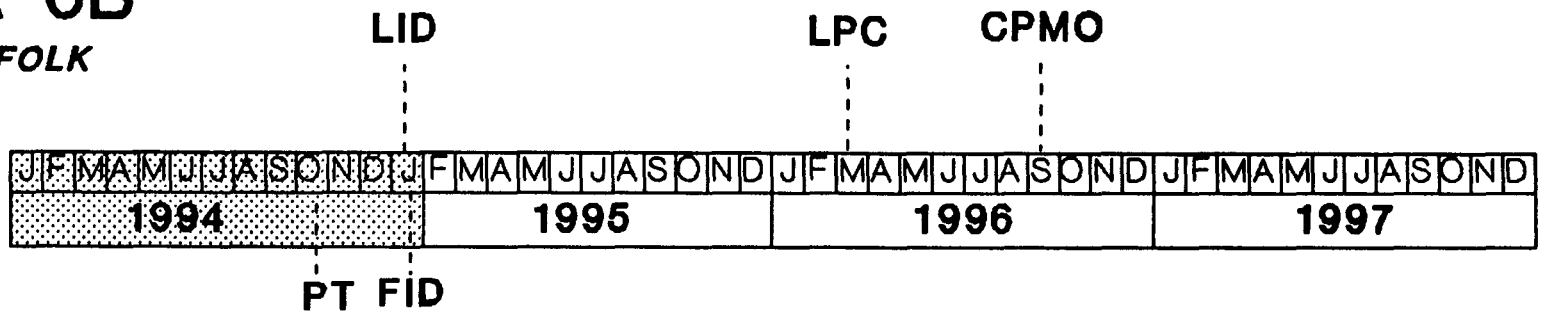
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

EA-6B

NORFOLK



JACKSONVILLE

PROTOTYPE-BUNO 159648
INDUCTED 10/3/94
FID-BUNO UNKNOWN
INDUCTION DATE 1/24/95
EST. COMPLETION DATE N/A

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
LID - LAST INDUCTION DATE
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

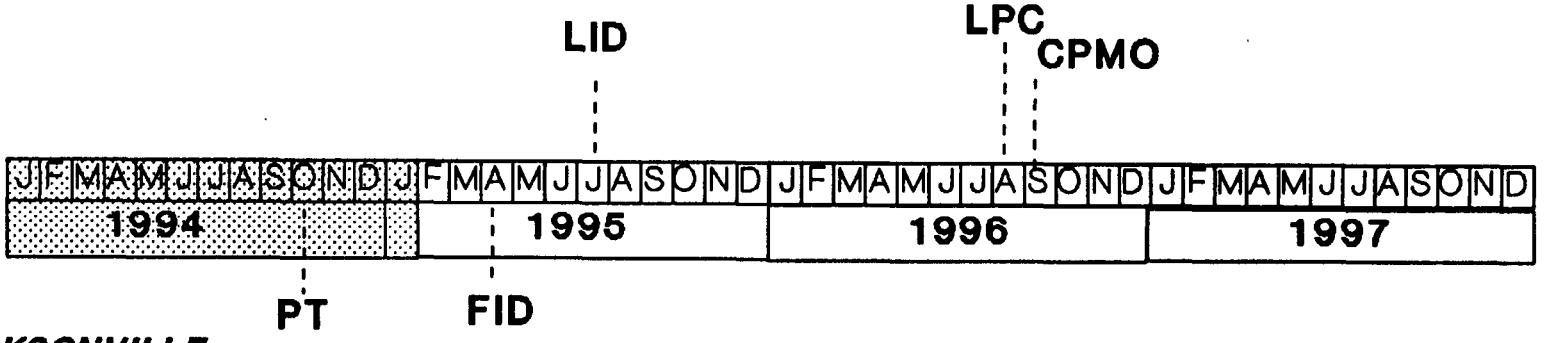
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

F-14

NORFOLK



JACKSONVILLE

PROTOTYPE BUNO 161162
INDUCTED 10/3/94
FID-BUNO UNKNOWN
INDUCTION DATE 3RD QTR 95
EST. COMPLETION DATE N/A

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
LID - LAST INDUCTION DATE
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

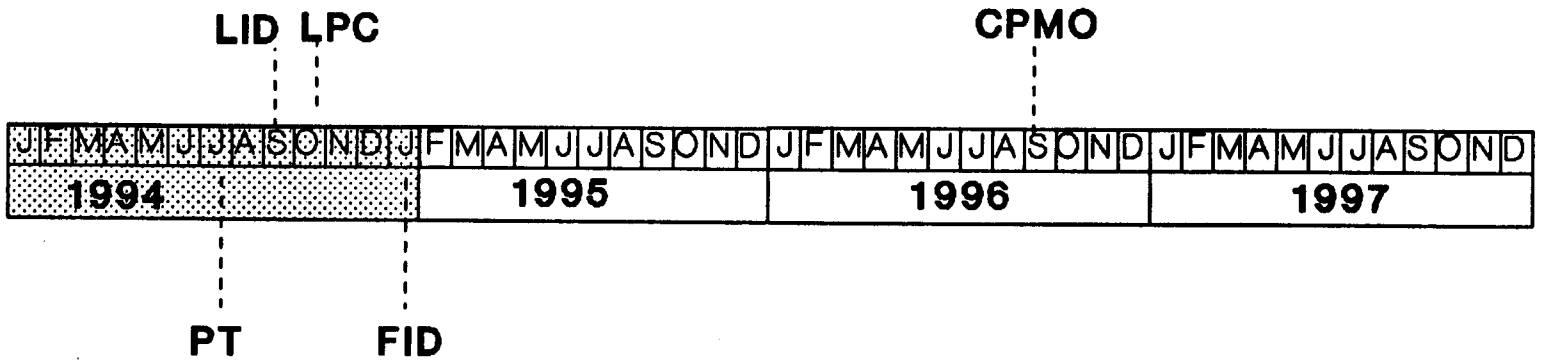
NADEP BRAC IMPLEMENTATION

ENGINE TRANSITION

NAVAL AVIATION SYSTEMS TEAM

501K-17

ALAMEDA



SAN ANTONIO ALC

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

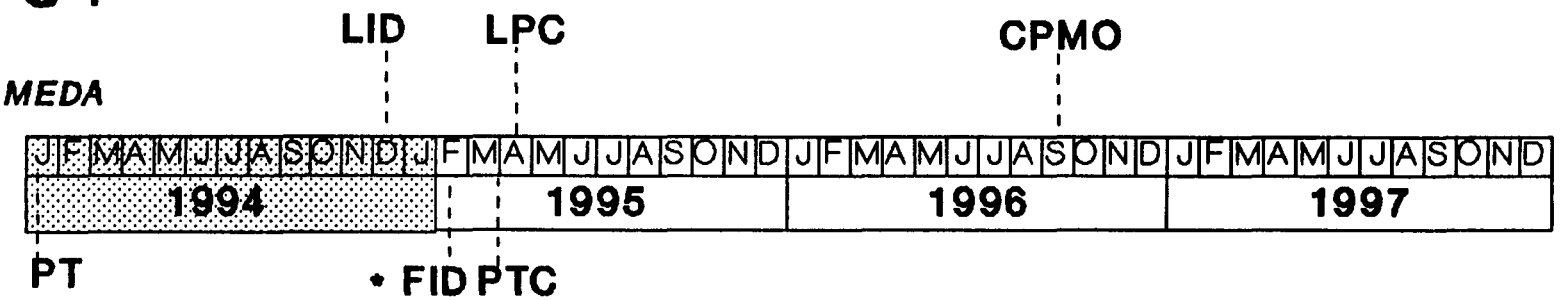
NADEP BRAC IMPLEMENTATION

ENGINE TRANSITION

NAVAL AVIATION SYSTEMS TEAM

TF34

ALAMEDA



JACKSONVILLE

- Full capability on core engine March 95. In the interim, Alameda will supply components until Jacksonville is capable (June 95 target).

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO- CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

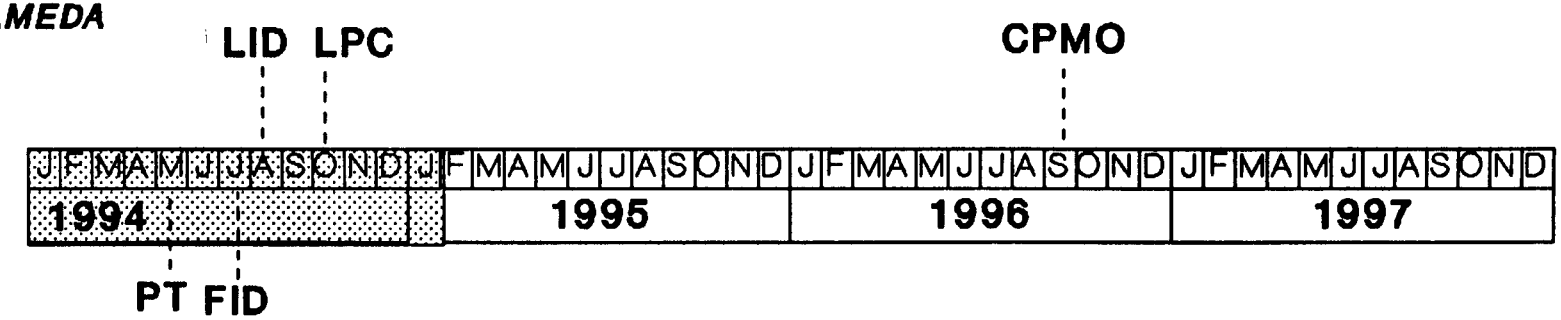
NADEP BRAC IMPLEMENTATION

ENGINE TRANSITION

NAVAL AVIATION SYSTEMS TEAM

T56-14/16

ALAMEDA



SAN ANTONIO ALC

INDUCTED 5/23/94

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

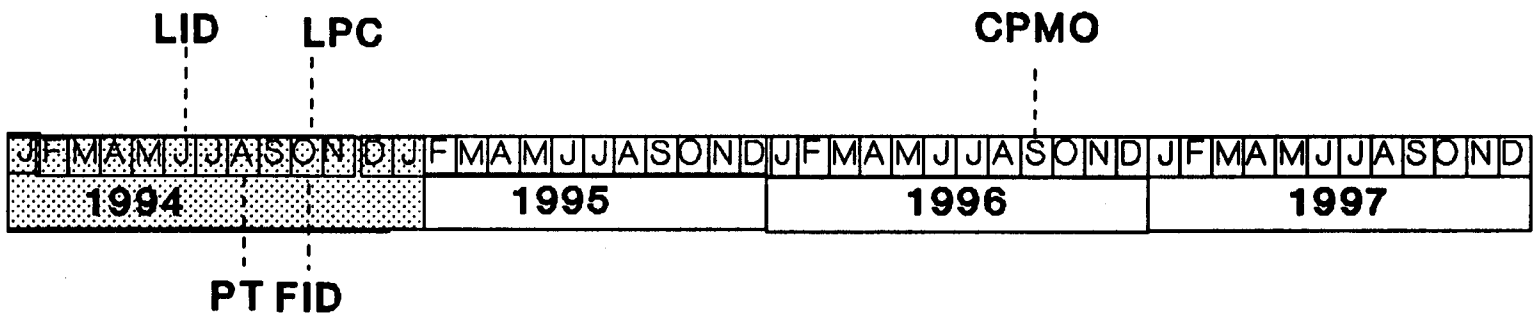
NADEP BRAC IMPLEMENTATION

ENGINE TRANSITION

NAVAL AVIATION SYSTEMS TEAM

T56-425

ALAMEDA



SAN ANTONIO ALC

INDUCTED 6/27/94

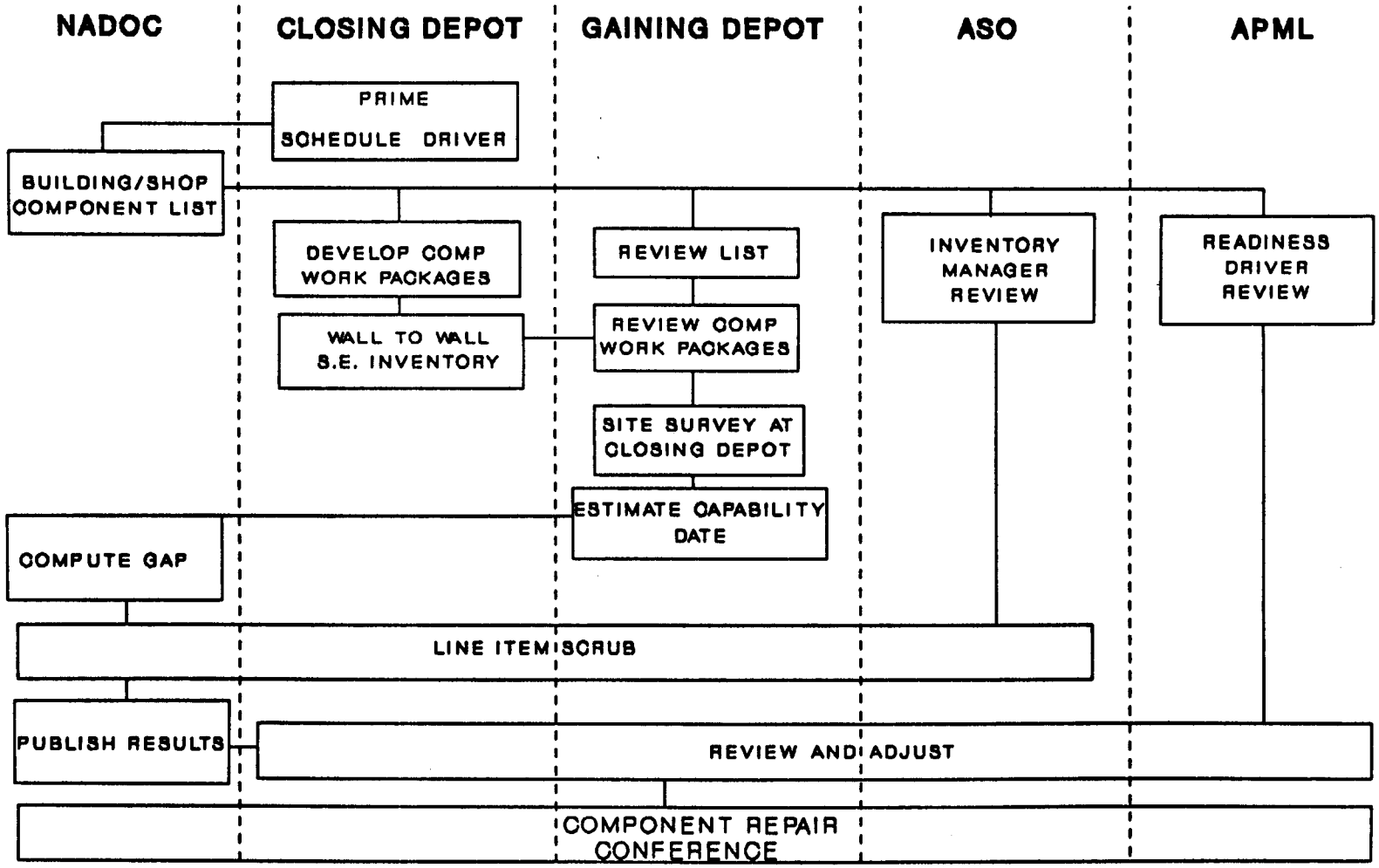
PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

NAVAL AVIATION SYSTEMS TEAM

NADEP BRAC IMPLEMENTATION
COMPONENT TRANSITION

Component Transition Planning Process



COMPONENT TRANSITION STRATEGY

NAVAL AVIATION SYSTEMS TEAM

GENERAL POLICY

* NAVY CORE COMPONENTS TO DOD ORGANIC ACTIVITIES
* DOD CORE THAT IS NAVY NON-CORE TO INTERSERVICE
* DOD NON-CORE TO COMMERCIAL

METHODOLOGY

* IDENTIFY CRITICAL AND HIGH VOLUME SINGLE SITE COMPONENTS
  - RETAIN IN PLACE
  - BUILD STOCK ASSETS
  - TRANSITION
* PHASE DUAL SITED

NAVY ORGANIC STRATEGY

* TRANSITION COMPONENTS IN SUPPORT OF CELLS
* TRANSITION NON-CELL COMPONENTS IN ALIGNMENT WITH PLATFORMS

TRANSITION RESPONSIBILITIES

NAVAL AVIATION SYSTEMS TEAM

CLOSING DEPOTS

* BECAUSE THE CLOSING SITE IS THE ONLY CAPABLE SITE FOR SINGLE SITED WORK, THE RESPONSIBILITY FOR RESOLUTION OF DEFICITS CAUSED BY PRODUCTION GAPS RESTS WITH THE CLOSING SITE.

* THE CLOSING SITE IS EXPECTED TO TAKE THE LEAD IN RESOLVING DEFICITS, COORDINATING WITH THE GAINING SITE ONLY WHEN LOCAL RESOLUTION CANNOT BE ACCOMPLISHED.

* CLOSING AND GAINING SITES ARE EXPECTED TO CONSIDER ALL ALTERNATIVES, SELECTING THE BEST OPTION FOR CONTINUED FLEET SUPPORT.

BIT MANAGER RESPONSIBILITIES

NAVAL AVIATION SYSTEMS TEAM

CLOSING SITES

* COMPLETE WALL-TO-WALL INVENTORY
* PREPARE TECHNICAL DATA PACKAGES
* ESTABLISH FIRM SE/PSE SHIP DATES
* ESTABLISH FIRM LAST INDUCTION DATES
* DISESTABLISH CAPABILITY

GAINING SITES

* CONDUCT SITE SURVEYS
* RECEIVE TECHNICAL DATA PACKAGES
* RECEIVE SE/PSE SHIP DATES
* ESTABLISH FIRM FIRST INDUCTION DATES
* ESTABLISH/CERTIFY CAPABILITY

TRANSITION RESPONSIBILITIES

NAVAL AVIATION SYSTEMS TEAM

TO BE DECIDED BETWEEN CLOSING & GAINING SITES:

* INCREASE EXECUTION SCHEDULES AT CLOSING SITE
* USE IN-HOUSE CONTRACT TEAMS AT CLOSING SITE
* DELAY LID OR ACCELERATE FID
* DISPATCH DEPOT FIELD TEAM TO GAINING OR CLOSING SITE
* PROVIDE CFA OR DEPOT FIELD TEAM ASSISTANCE TO "I" LEVEL
* USE INTERIM CONTRACT SUPPORT

ASO REPAIR PROGRAMS STRATEGY

NAVAL AVIATION SYSTEMS TEAM

- Identify and focus transition resources on "Active" components (Readiness Drivers)
- Move Non Core component workload to private industry, rightsizing Navy organic depots.
- Partner with the Naval Aviation Systems Team NAVAIR, NADOC, NADEP's and ASO

ASO REPAIR PROGRAM TACTICS

NAVAL AVIATION SYSTEMS TEAM

- Single site dual sited items to allow for orderly move of support equipment
- Prioritize readiness impact components using default gap (2 quarters)
- Work with closing and gaining depots to adjust last and first induction dates to minimize transition impact
- Establish "bridge contracts" where possible (last resort)

SUMMARY

NAVAL AVIATION SYSTEMS TEAM

* AIRFRAMES, ENGINES AND SUPPORT SERVICES MANAGEABLE TRANSITIONS

* MANAGEMENT EMPHASIS ON COMPLEX COMPONENT TRANSITIONS

* FUNDING SITUATION IS CONSTANTLY CHANGING

* BRAC FUNDING IS A CONTINUING CONCERN

* AWAITING BRAC-95 INPUTS

Document Separator

NAVAL AVIATION DEPOT OPERATIONS CENTER

NAVAL AVIATION SYSTEMS TEAM

BASE CLOSURE & REALIGNMENT for NAVAL AVIATION DEPOTS

Presentation to the BCRC Staff

13 February 1995

REPRODUCED AT GOVERNMENT EXPENSE

6b) Jeopardize Core measurement

NAVAIR CORE SUMMARY
USING DoD CORE FLOW PROCESS

(A) 9.5 m Hours

JCS SCENARIO
INPUT BY T/M/S
ENGINES/COMPS
OTHER SUPPORT

HRS: _____

(B) 12.5 m hours

WORKLOAD ADJUST
TIMES INCREASED
OP TEMPO
(1.3 FACTOR)

HRS: _____

(C) 12 x 5 10 x 2 Sat Sunday 2.5 mil Sept & 12.5

EST SCENARIO
WORKLOAD
(TOTAL BLOCKS
A AND B)

HRS: _____

(D)

TRADE SKILL
BREAKDOWN

(E)

RESOURCE
ADJUSTMENT
(1.6)

HRS: _____

(F)

BASIC CORE
ADJUSTMENT
(TOTAL BLOCKS
C AND E)

HRS: _____

(G)

ADJUST (12.47%)
ECONOMY/
EFFICIENCY

HRS: _____

(H)

PEACETIME
CORE
(TOTAL BLOCKS
F AND G)

HRS: _____

(I)

LAST SOURCE
REQUIREMENTS
Contractor & private Depts

HRS: 0.3 mil hours

Not all Core Jeopardize NADEP

(J)

TOTAL ORGANIC CAPABILITY
REQUIREMENTS
(TOTALS BLOCKS H AND I)

HRS: 13 mil Hours

25% Goes to Core work Force by 1997

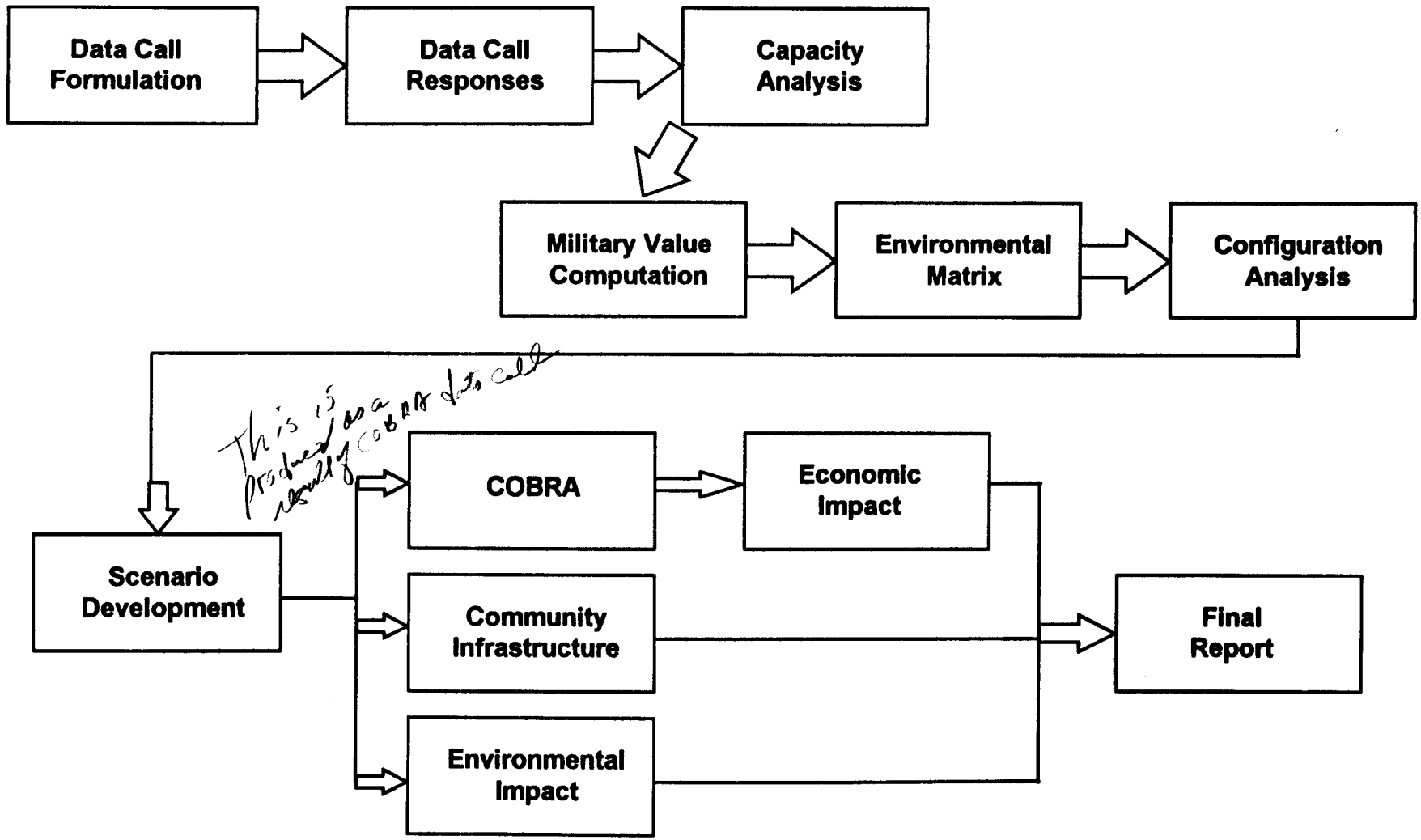
AGENDA

NAVAL AVIATION SYSTEMS TEAM

- BRAC-93 PRE-DECISIONAL PHASE
  - Capacity & Utilization Measurement
  - Econometric Analysis
  - Scenario Development
  - Economic Modeling (COBRA Input)
- BRAC-93 IMPLEMENTATION
  - Organizing for Closure
  - Process Development
  - Closure & Transition Schedules
- RELATED ISSUES
  - Joint Analysis
  - CORE Analysis

PRE-DECISIONAL PROCESS

NAVAL AVIATION SYSTEMS TEAM



IMPORTANCE OF CAPACITY

NAVAL AVIATION SYSTEMS TEAM

"Since the existence of excess capacity is generally the primary reason to close bases, the effective execution of the capacity analysis is a critical step in the assessment process and must be done rigorously."

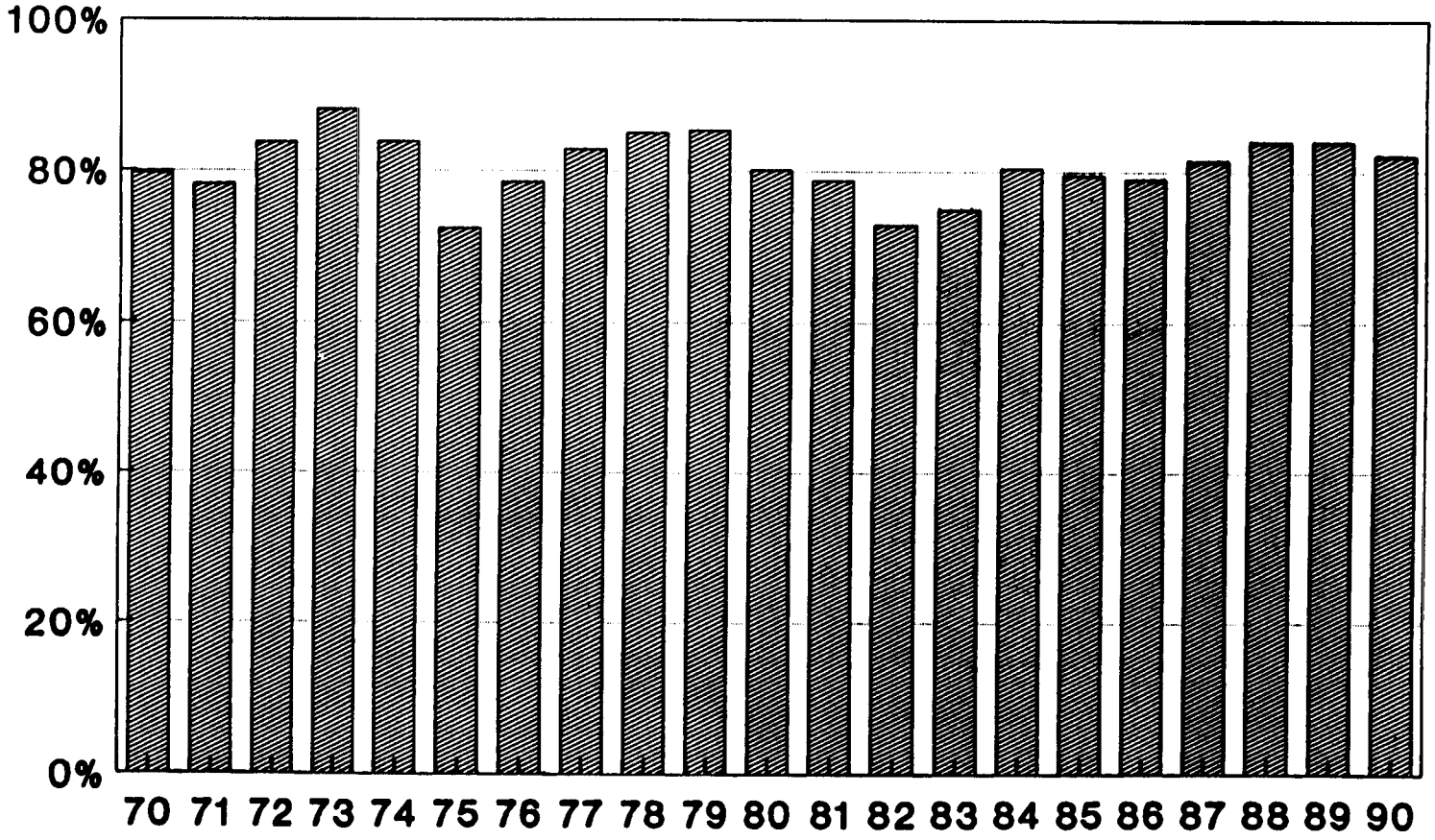
- Logistics Management Institute, 1989

CAPACITY FINDINGS
LMI RESEARCH/BRAC-88

NAVAL AVIATION SYSTEMS TEAM

- No single measure of capacity will be appropriate in every situation. Rather, the measure of capacity must be somewhat tailored for the situation at hand.
- Gross system-level analysis passes over discrepancies in the details. Aggregated indexes of capacity and utilization do not resolve the detailed capacity issues.
- Industrial plants usually operate at capacity utilization rates that are well below 100 percent.
- Maximum and optimum utilization levels are separate and distinct thresholds.
- There should be a relationship between capacity, utilization and operating costs. HOW MUCH EXCESS CAPACITY OVER TIME
- Capacity decisions relate to both long-term and short-term considerations.
  - Long Term (facility size)
  - Short Term (variations in capacity requirements)

Utilization of Total Industrial Manufacturing Capacity 1970-90



Source: The Federal Reserve Board

Capacity Working Group

MEASURING CAPACITY & UTILIZATION

NAVAL AVIATION SYSTEMS TEAM

- Uses of Capacity and Utilization
  - *Economic Indicators*
  - *Macro-economic measure of overall business activity*
- Definitions of Capacity and Utilization
  - *Capacity Utilization Rate (Federal Reserve Indexes, a statistical/economic 6 step process)*
  - *Actual Operations*
  - *Preferred Operations*
  - *Practical Capacity*
  - *Design Capacity*
  - *Effective Capacity*
  - *Actual Output*
- Determinants of Capacity
  - *Facilities*
  - *Products or Services*
  - *Processes*
  - *Human Considerations*
  - *Operations*
  - *External Forces*

TWO CAPACITY INDICATORS

NAVAL AVIATION SYSTEMS TEAM

- DoDInstruction 4151 Capacity
  - Snapshot in time
  - Current plant configuration
  - Constraining factors:
    - One shift operation
    - Facilities
    - Equipment
    - Configuration
    - Manpower
  - Short Term Assessment

BRAC 93 close 2 depots

- Maximum Potential Workload
  - Potential over time
  - Potential configuration based on workload mix
  - Constraining factors:
    - One shift operation
    - Facilities (foot print)
  - 100% Utilization cannot realistically be achieved
  - Long Term Assessment

BRAC 93 close 2½ to 3 depots

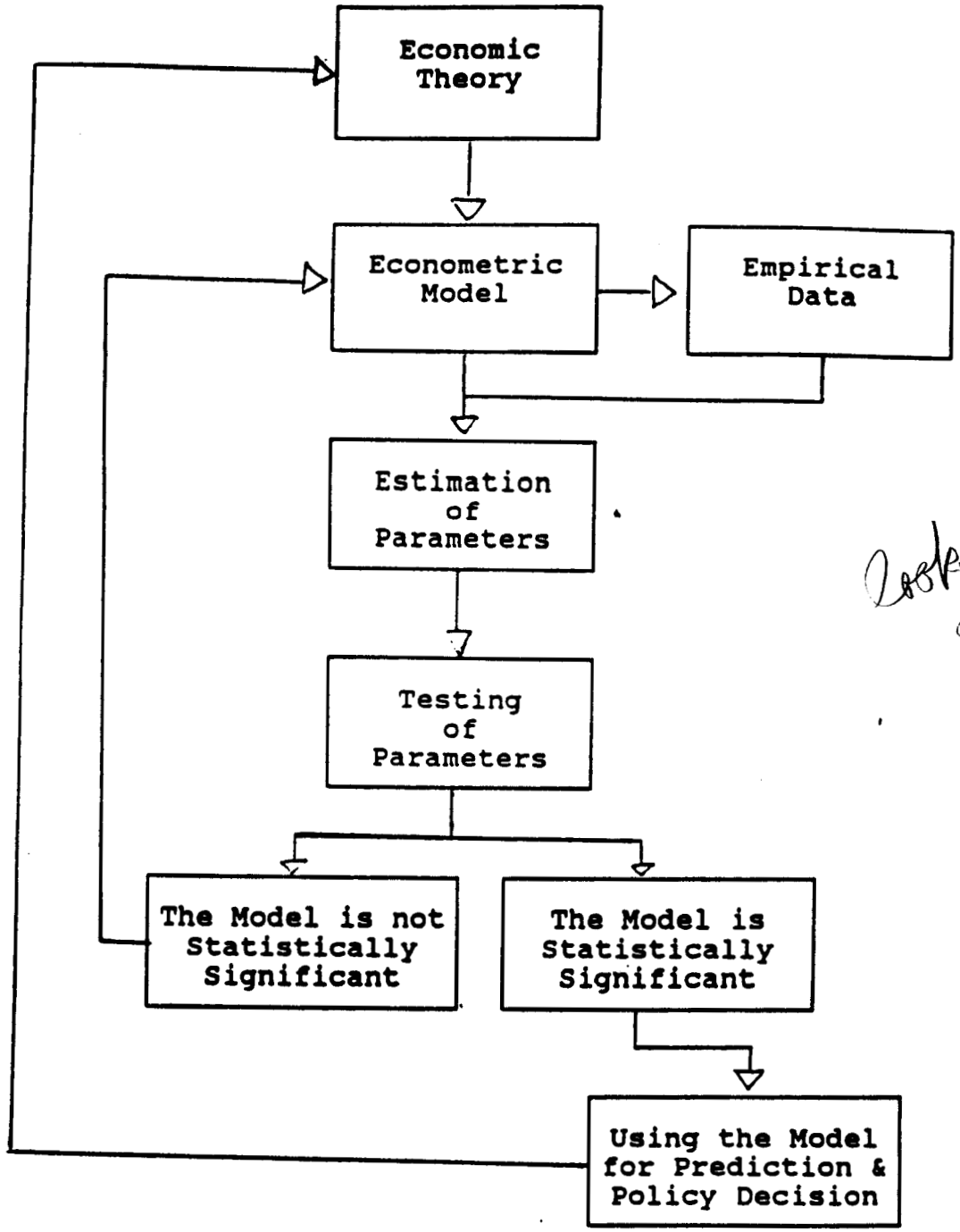
ECONOMETRIC TECHNIQUE

Goal

Quantify economies of scale.
Reproducible methodology.
Statistically sound.

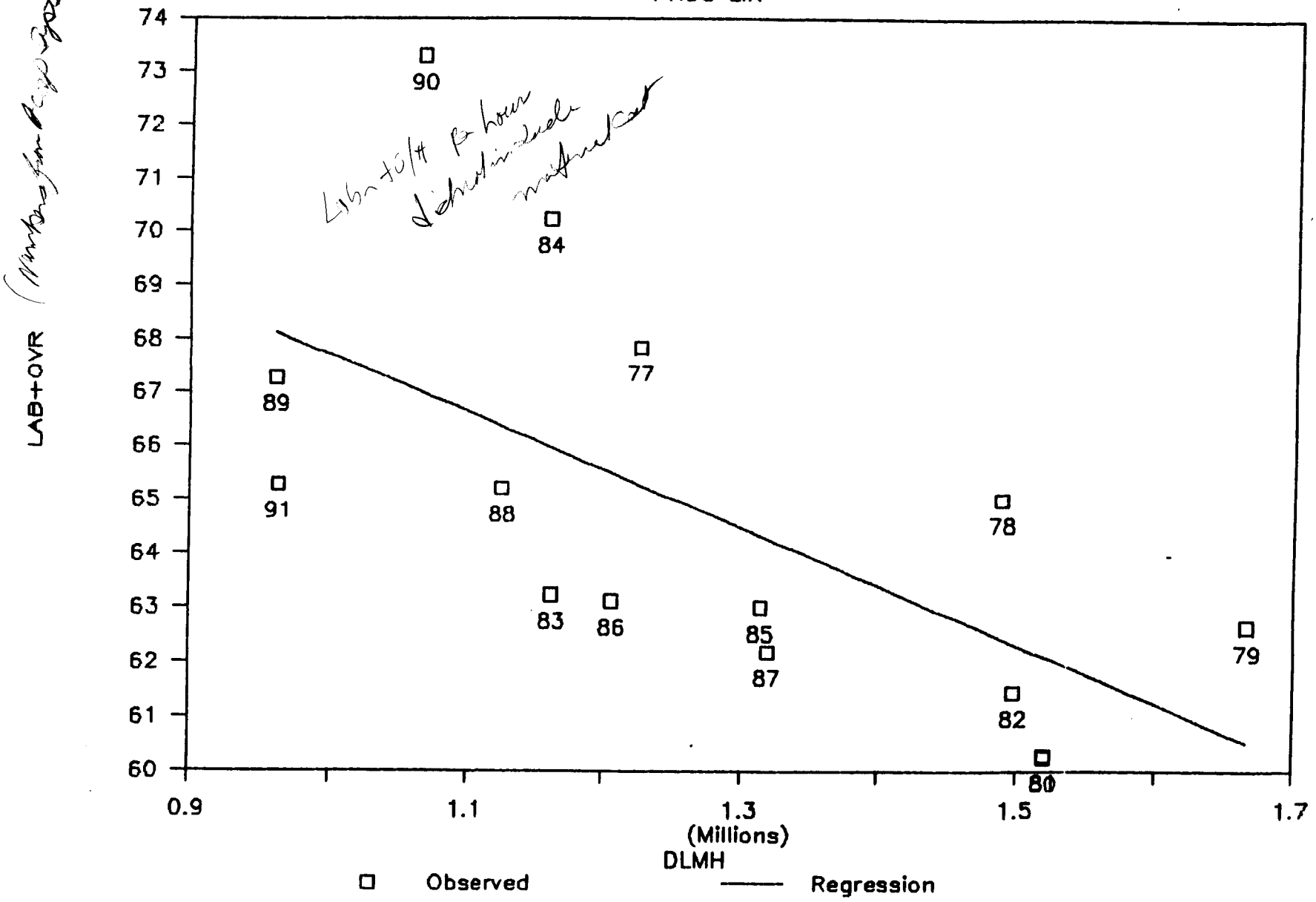
Approach

Statistical analysis of historical data.
Inflation adjust past costs.
Use Direct Labor Manhours as proxy for units produced.
Measure production volume in manhours.
Look for linear and quadratic relationships.


Economic Theory
Econometric Model
Empirical Data
Estimation of Parameters
Testing of Parameters
The Model is not Statistically Significant
The Model is Statistically Significant
Using the Model for Prediction & Policy Decision

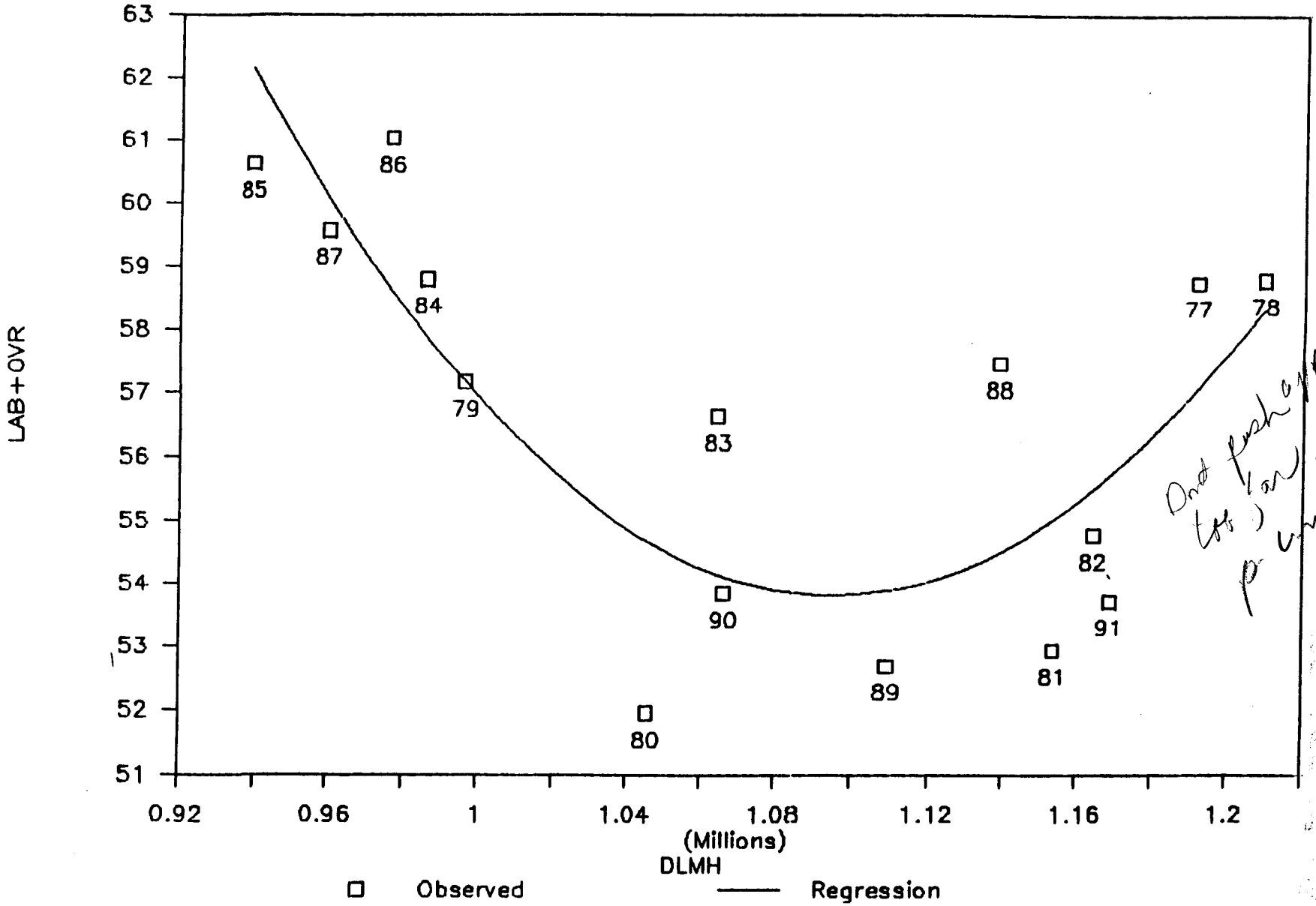
DEPOT XYZ

PROG LIN

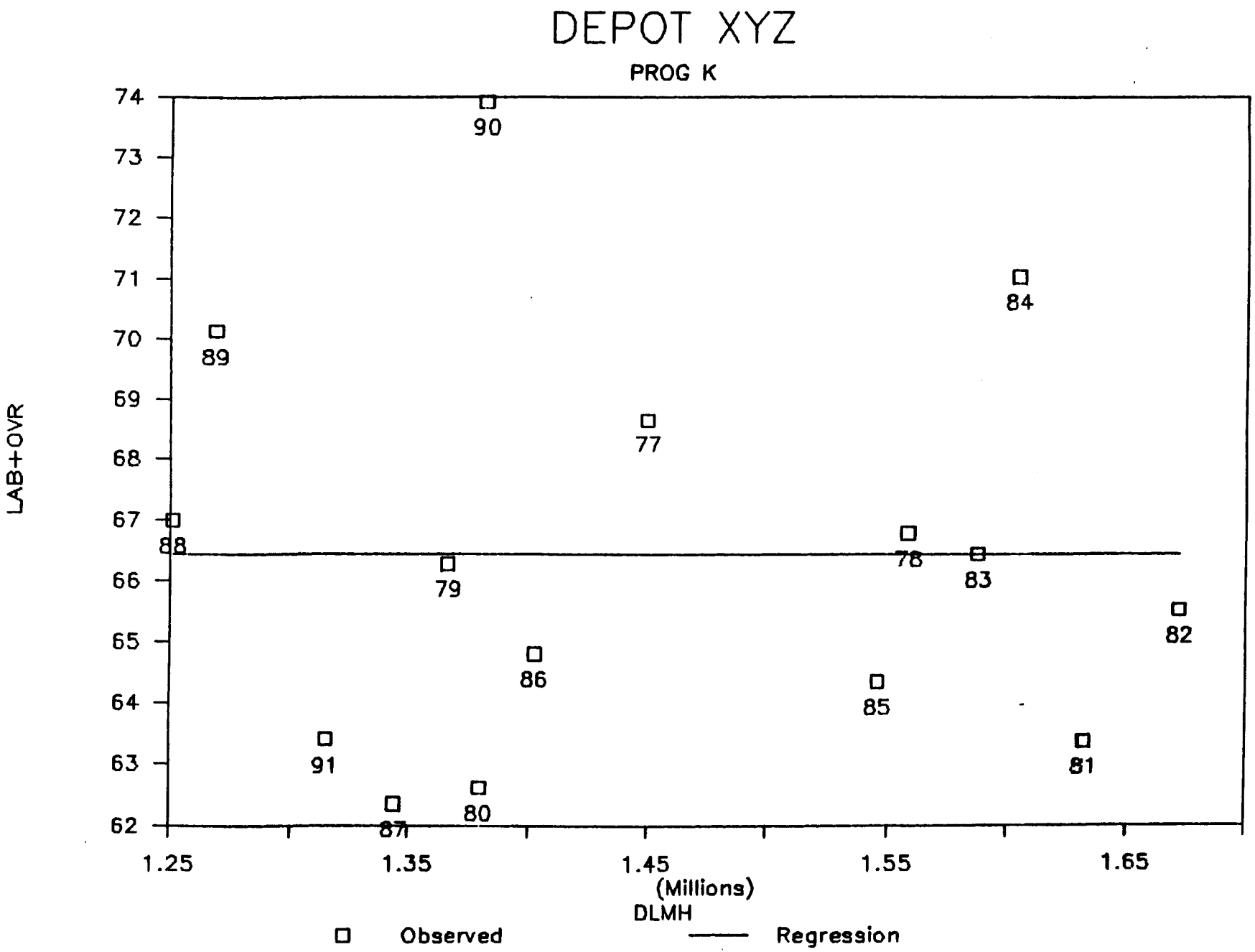


DEPOT XYZ

PROG QUAD



Don't push up against limits too soon because the p curve costs extra to get up against limits, reduces agility within constraints


DEPOT XYZ
PROG K
LAB+OVR
74
73
72
71
70
69
68
67
66
65
64
63
62
90
89
84
77
88
79
78
83
82
86
85
91
81
87
80
1.25
1.35
1.45
1.55
1.65
(Millions)
DLMH
Observed
Regression

Assumptions
Econometrics

- Cost Volume Relationship Changing Slowly
- Changes Remain Within Historical Norms
- Output Can Be Measured in Manhours
- Material Costs Ignored
- Transportation Costs Ignored
- Uniform Accounting – Critical when comparing between services
- Sufficient Data Available

SCENARIO DEVELOPMENT

NAVAL AVIATION SYSTEMS TEAM

- Identification
- Assumptions
- Mission Workload Realignment
- Facility Closure Requirements
- Navy Depot Economic Model

SCENARIO DEVELOPMENT

NAVAL AVIATION SYSTEMS TEAM

- Identification
  - Intent of scenario
  - Scope of scenario
- Assumptions
  - Time period of closure or realignment
  - Specific destinations for mission workloads
  - Data Sources (for rates, workload, etc.)

SCENARIO DEVELOPMENT

NAVAL AVIATION SYSTEMS TEAM

- Facility Closure Requirements
  - Shutdown
  - Caretaker
- Mission Workload Realignment
  - Workload Re-distribution Plan (rationale)
  - Workload Re-allocation
  - Workload Transition Plan (phasing)
  - Environmental
  - Special/Other
- Navy Depot Economic Model

Workload Re-distribution Plan

NAVAL AVIATION SYSTEMS TEAM

24 May 1993

SCENARIO NUMBER: X

DEPOTS: NADEPs Alameda, XXX & XXX

CLOSING DEPOT	T/M/S	GAINING DEPOT	RATIONALE
Alameda	P-3		NADEP XXX was assigned as the source of repair for this aircraft because they are currently a designated repair point for all type models of the P-3 aircraft. Current open capacity allows the additional workload without adversely impacting other workload. The P-3 and EP-3 aircraft are core workload efforts.
Alameda	S-3		NADEP XXX was assigned as the source of repair on the S-3 aircraft due to the fact that this platform is core workload. The capacity at XXX. is currently available to support the additional workload associated with the airframe without adversely impacting the currently workload or mission.
Alameda	A-6/ EA-6		NADEP XXX was assigned as the source of repair on these aircraft because (1) the other depot with A-6 rework capability is a potential closure (on this scenario), (2) XXX has experience on both types of structures - metals and composites, and (3) open capacity allows this workload without impacting the facility size

NAVAL AVIATION SYSTEMS TEAM

Workload Transition Plan

Gradual Transition

SCENARIO No.: _____ DATE:

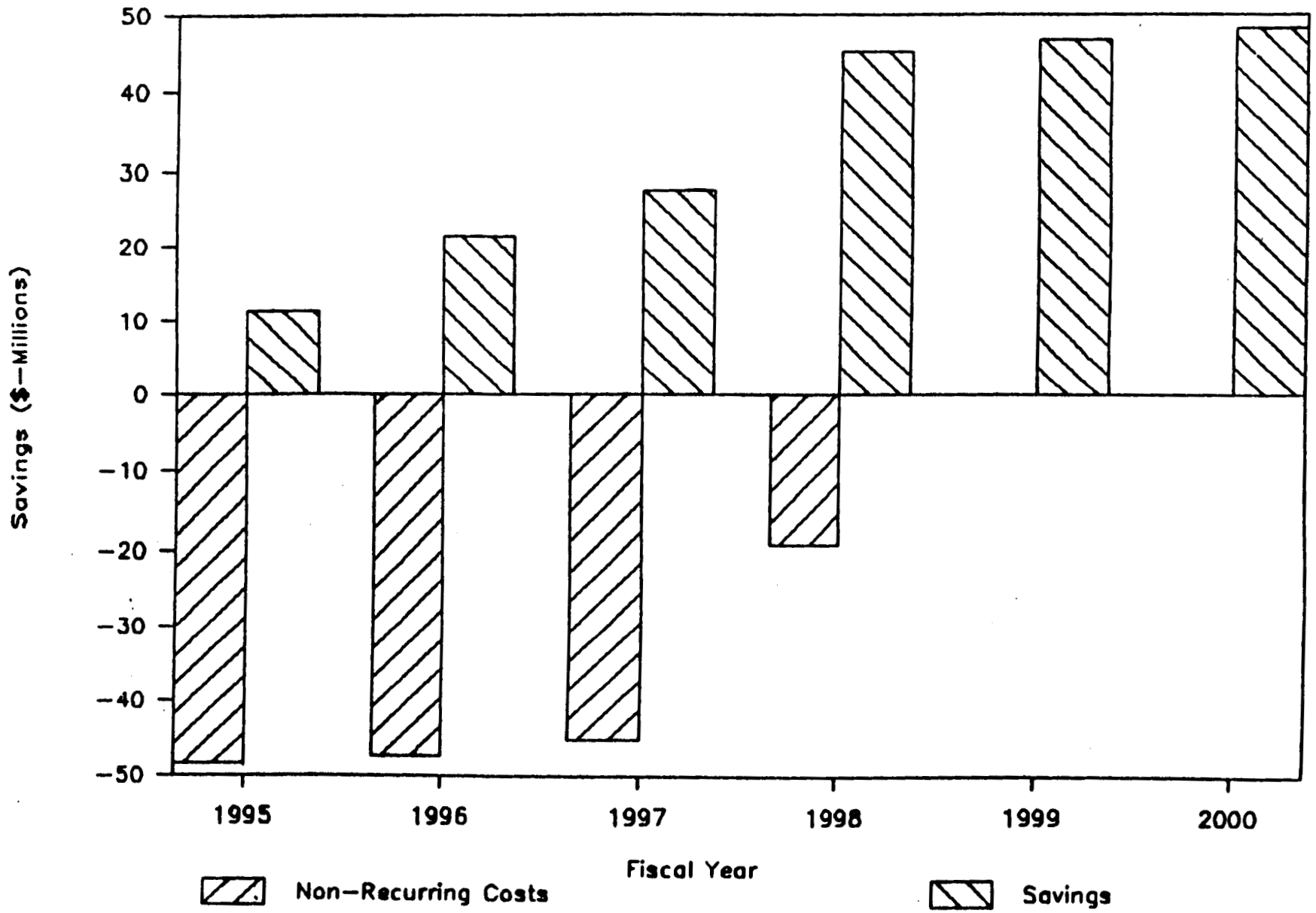
DEPOT:

ORIGINATING DRP AND
TRANSITION SITE CODE:
A = ALAMEDA, B = NORFOLK, C = NORTH ISLAND,
E = JACKSONVILLE, F = CHERRY POINT, G = PENSACOLA,
J = AIR FORCE, I = ARMY, M = COMMERCIAL

			TRANSITION PLAN				
ORG DRP	SYSTEM	TRANS SITE	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999

ECONOMIC MODEL

Costs and Savings for Closing Depot XYZ



RECURRING COSTS

Major Influences

Higher for Labor
Rates were closer in
BRAC-93

- Labor and Overhead Rates
  Regional/NADEP Differences

- Overhead Savings With Consolidation
  Some G&A Expenses NOT Transferred

- Economies of Scale
  Rates Change With Workload Volume

NON-RECURRING COSTS

- Severence Pay - Salaries, Yrs Service and Age
- Personnel Relocation - TDY, Moving, Residence
- Recruitment - Cost of New Hires at Gaining NADEP
- Training/Productivity Lag - Half of Salary During Training
- Equipment Relocation - Cost Ton/Mile + Packing Cost/Ton
- Realignment Coordination - Team Trips per Line Moved
- Cost of Disruption - Percentage of Annual Labor Costs
- MILCON - New Requirements at Gaining Sites
- Facility/Equipment Shutdown Costs - Mothball Cost by SqFt
- Transport NIF Inventory - Fixed Amount Spread Over Time
- Other

ECONOMIC MODEL ANALYSIS
CORPORATE SUMMARY

Option/Alternative
DEMONSTRATION CLOSE

$ 000 = cash inflow
$(000) = cash outflow

10-Nov-93
07:58 AM

Discount Rate/Required Rate of Return 10.00%

CASH INFLOWS	YEAR 1995	YEAR 1996	YEAR 1997	YEAR 1998	YEAR 1999	YEAR 2000
Recurring						
1. Economies of Scale (from econometric model)	2,640,030	4,449,562	5,463,395	7,211,116	7,352,671	7,497,371
2. Decreased Net Operating Costs (closure & reposture)	37,484,298	74,830,427	102,244,455	176,439,738	182,791,568	189,372,065
Non-Recurring						
3. Milcon Avoidance	0	0	0	0	0	0
Cash Inflow Subtotal	$40,124,328	$79,279,989	$107,707,850	$183,650,854	$190,144,239	$196,869,436

CASH OUTFLOWS	YEAR 1995	YEAR 1996	YEAR 1997	YEAR 1998	YEAR 1999	YEAR 2000
Recurring						
1. Diseconomies of scale (from econometric model)	0	0	0	0	0	0
2. Increased Net Operating Costs	(31,104,054)	(62,657,225)	(87,693,729)	(151,315,484)	(156,762,841)	(162,406,304)
Non-Recurring						
3. Severance Pay	(6,186,670)	(7,145,983)	(7,957,002)	(11,817,877)	0	0
4. Personnel Relocation	(1,358,578)	(1,598,881)	(1,782,647)	(2,644,424)	0	0
5. Recruitment (new hires)	(247,990)	(231,171)	(160,352)	(461,986)	0	0
6. Training/Productivity Lag (Gaining NADEP)	(2,525,002)	(2,490,849)	(1,681,244)	(4,878,388)	0	0
7. Equipment Relocation	(11,990,415)	(12,470,032)	(12,968,833)	0	0	0
8. Realign Coord (TDY & Trvl)	(160,643)	0	0	0	0	0
9. Cost of Disruption	(14,021,370)	(10,496,123)	(6,434,662)	0	0	0
10. MILCON	0	0	0	0	0	0
11. Facility/equipment shutdown costs	(894,235)	(930,004)	(967,204)	0	0	0
12. Transport NIF Inventory	(322,000)	(334,880)	(348,275)	0	0	0
13. Other Costs	(13,022,667)	(13,543,573)	(14,085,316)	0	0	0
Cash Outflow Subtotal	($81,833,623)	($111,898,721)	($134,079,264)	($171,118,160)	($156,762,841)	($162,406,304
Net Cash Flows (inflow + outflow)	($41,709,295)	($32,618,732)	($26,371,414)	$12,532,694	$33,381,398	$34,463,132
Cumulative savings/(losses)	($41,709,295)	($74,328,028)	($100,699,442)	($88,166,748)	($54,785,350)	($20,322,218

AGO	$13,673,471
Rate Of Return	13.2%
Years Payback Period	9

ECONOMIC MODEL ANALYSIS
CORPORATE SUMMARY

Option/Alternative
DEMONSTRATION CLOSE

$ 000 = cash inflow
$(000) = cash outflow

10-Nov-93
07:58 AM

	YEAR 1995	YEAR 1996	YEAR 1997	YEAR 1998	YEAR 1999	YEAR 2000
Cash Inflows						
1. Decreased Operating Costs	$9,020,274	$16,622,764	$20,014,121	$32,335,370	$33,381,398	$34,463,132
2. Milcon Avoidance	$0	$0	$0	$0	$0	$0
Total Cash Inflows	$9,020,274	$16,622,764	$20,014,121	$32,335,370	$33,381,398	$34,463,132
Cash Outflows						
1. Increased Operating Costs	$0	$0	$0	$0	$0	$0
2. Non Recurring Up Front Costs	($50,729,569)	($49,241,496)	($46,385,535)	($19,802,676)	$0	$0
Total Cash Outflows	($50,729,569)	($49,241,496)	($46,385,535)	($19,802,676)	$0	$0
Net Cash Flows (inflow + outflow)	($41,709,295)	($32,618,732)	($26,371,414)	$12,532,694	$33,381,398	$34,463,132
Cumulative savings/(losses)	($41,709,295)	($74,328,028)	($100,699,442)	($88,166,748)	($54,785,350)	($20,322,218)

Total Net Present Value	$13,673,471
Rate Of Return	13.2%
Years Payback Period	9

Non-Recurring Up Front Costs Summary

3. Severance Pay	(33,107,532)
4. Personnel Relocation	(7,384,531)
5. Recruitment (new hires)	(1,101,499)
6. Training/Productivity Lag (Gaining NADEP)	(11,575,483)
7. Equipment Relocation	(37,429,279)
8. Realign Coord (TDY & Trvl)	(160,643)
9. Cost of Disruption	(30,952,155)
10. MILCON	0
11. Facility/equipment shutdown costs	(2,791,443)
12. Transport NIF Inventory	(1,005,155)
13. Other Costs	(40,651,556)
Total	(166,159,277)

ECONOMIC MODEL ALGORITHMS AND ASSUMPTIONS

The following describes the algorithms used internally in the Navy's Economic Model to calculate various costs. Unless otherwise stated, the algorithms shown are for the first year with subsequent years calculated similarly and adjusted for inflation. All of these algorithms can be modified as necessary.

Non-Recurring Costs

Severance Pay:

No. of People * Yrs. Service <= 10 * Average Weekly Salary
+ No. of People * Yrs. Service > 10 * 2 * Avg. Weekly Salary
+ No. of people * 10% of above for each year over age forty

Note: The above is not to exceed one years salary. This is calculated separately for each personnel category using average values for the relevant parameters and summed to get the final result.

Personnel Relocation Cost:

Per diem rate for employees is set at $87.33, the average rate for the depots considered. The per diem for spouses and children 12 or over is 75% of that rate, and for children under 12 it is 50%.

Assume the average relocation is a family of four for a distance of 2,000 miles. Mileage allowance is $0.20 per mile. Moving cost per hundred weight is $90, storage per hundred weight is $2.25.

The costs per employee add up as follows:

$0.20 per mile * 2000 miles =	$ 400
Per diem at 350 miles/day, max 8 days =	$ 1,572
House hunting trip (10 days) =	$ 3,420
Temp. quarters subsistence (60 days max) =	$10,371
Misc. expenses	$ 700
Sale of residence, Max. =	$19,249
Purchase of residence, Max. =	$ 9,624
Movement of household goods, 18K lbs. =	$16,200
Storage of household goods, 3 Mon. Max. =	$ 1,215
Total =	$62,751

Added to the above is the home owner's assistance program cost less sale of residence allowance for GS-13s and above based upon 25.2% of the average home market value.

Recruitment Cost:

Number General Schedule (White Collar) Hires * $644 +
The Number Wage Grade (Blue Collar) Hires * $442

Training/Productivity Lag:

Number of hires * 1/2 Monthly Salary * Months of Training

Note: Months of training assumed are 7 months for blue collar and 5 months for white collar hires.

Equipment Relocation:

Assume 100K short tons of equipment moving times $0.05 per ton mile times the average number of miles to the other depots. The teardown, crating, uncrating and reassembly cost is assumed to be $258.80 per ton. The total cost calculates as follows:

100K Tons * $0.05 per ton mile * Avg. miles to other depots + 100K Tons * $258.80 per ton

Note: The average miles to the remaining depots varies from 1,171 miles to 2,042 miles. This gives totals ranging between $31.7M to $36.1M. These totals are then divided equally across each of the three years allowed for closure. The years after the first are adjusted for inflation.

Realignment Coordination:

The cost to transfer one product line is assumed to involve one team of four persons and five total trips. The average round trip airfare to the other depots varies from $416 to $628. The average per diem rate over all the depots is $87 per day. The cost per product line calculates as:

(Avg. Airfare + 5 Days per diem) * 5 Trips * 4 Employees

Note: The above calculates to between $16,893 and $21,293 per product line depending upon depot. This figure is then multiplied by the number of product lines repostured.

Cost of Disruption:

This is assumed to be 25% of the annual labor costs of a closing facility, and 8% of the labor cost of the workload out from a facility losing work in a reposturing.

MILCON:

The cost of MILCON required to handle new workload at gaining facilities is assumed zero by direction.

Facility/Equipment Shutdown Costs:

The total cost is assumed to be $1.13 times the square feet of the product lines transferred out divided equally over the three years allowed for closure. The second and subsequent years are adjusted for inflation.

Transport NIF Inventory:

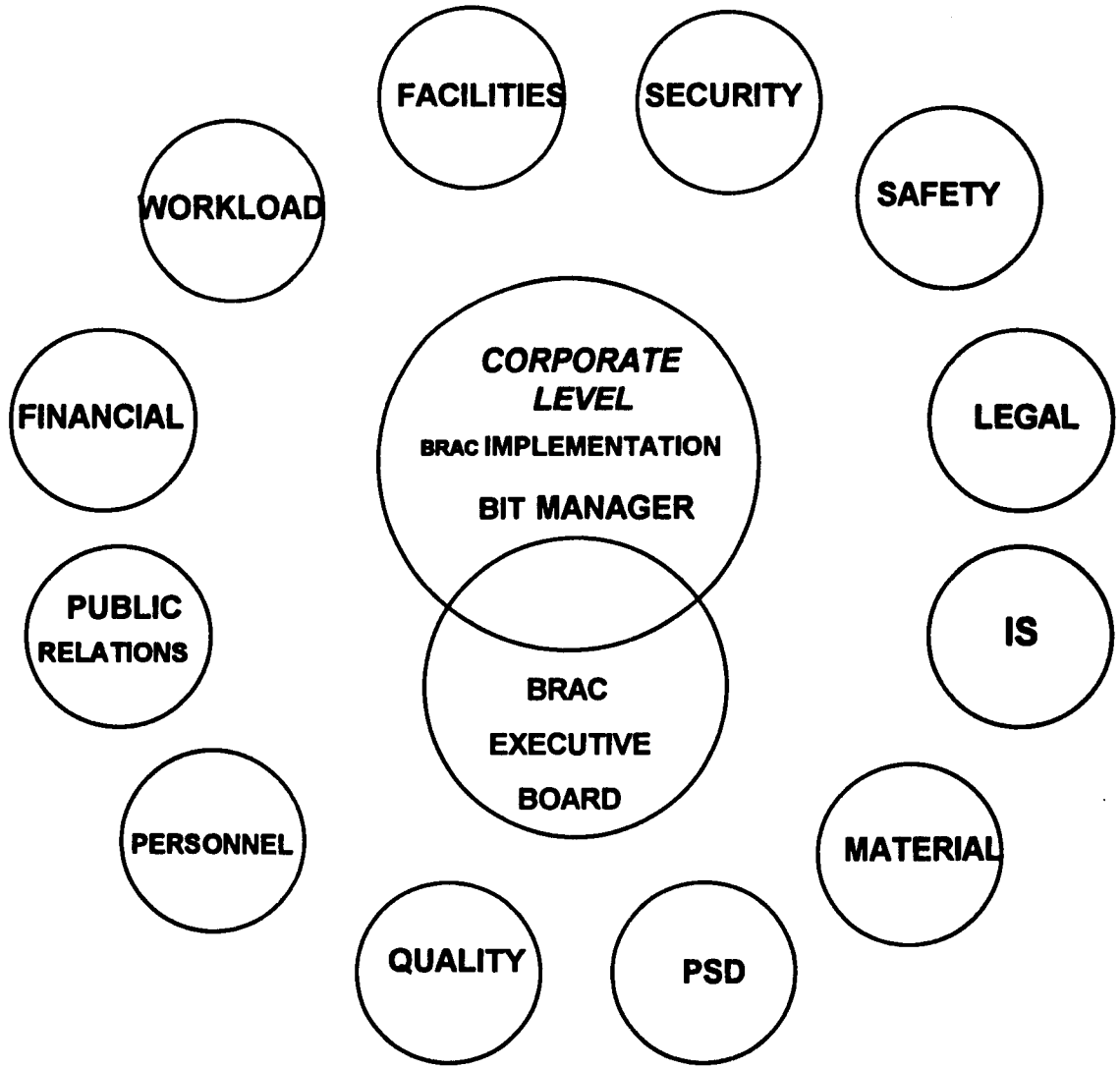
A total cost of $966,000 is assumed divided equally over the three years allowed for closure. The second and subsequent years are adjusted for inflation.

Recurring Costs

The percentage of General & Administrative expenses not transferred with the workload to the gaining depot from the losing depot is assumed to be 64.76%.

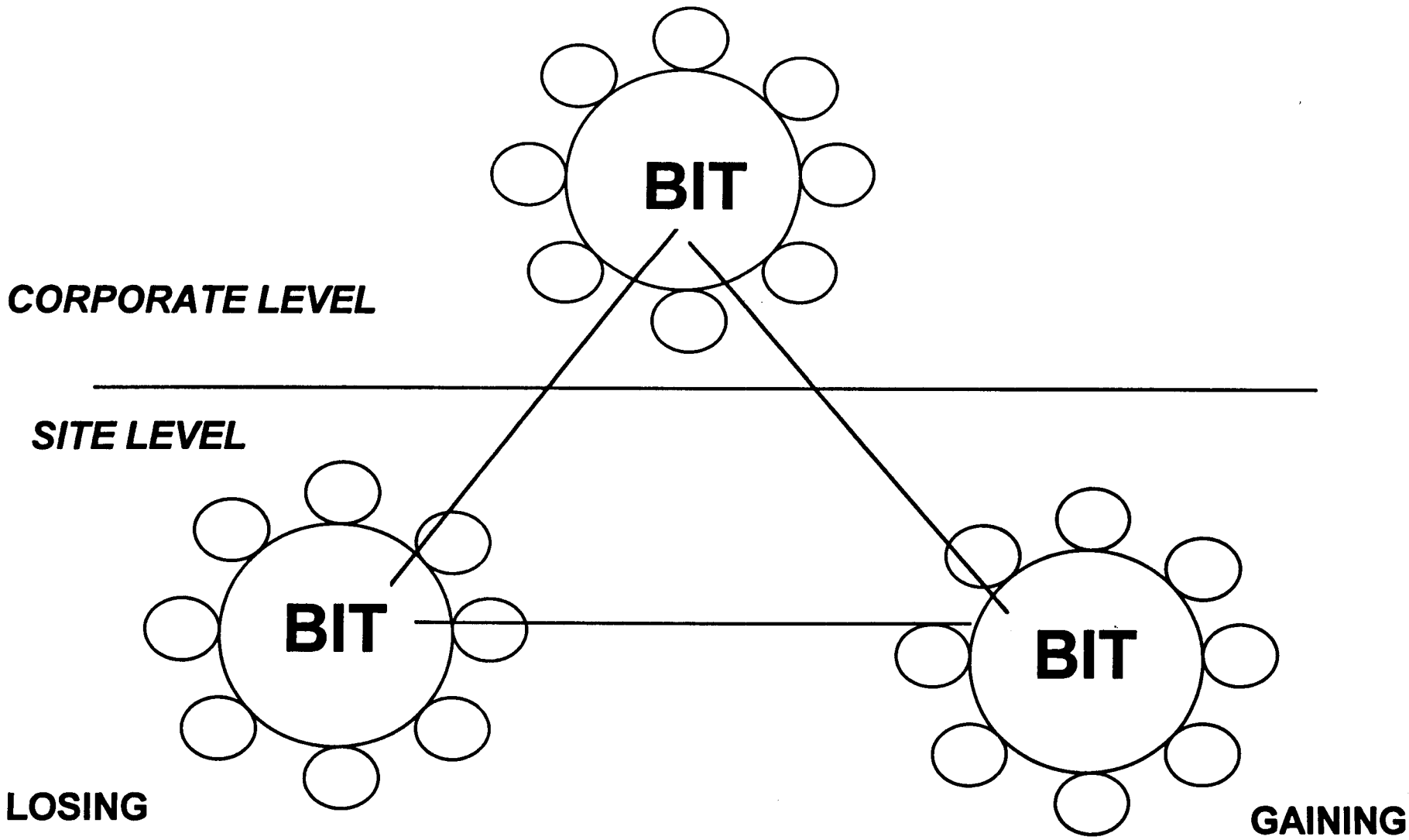
ORGANIZING for CLOSURE

NAVAL AVIATION SYSTEMS TEAM



ORGANIZING FOR CLOSURE

NAVAL AVIATION SYSTEMS TEAM



BACKGROUND

NAVAL AVIATION SYSTEMS TEAM

- BRAC-93 Closes 3 NADEPs
  - Alameda
  - Pensacola
  - Norfolk
- Closing actions must be completed within 6 years
  - Alameda schedule compatible with N.A.S.
  - Pensacola schedule driven by CNET Chief Nav Education Trng.
  - Norfolk schedule coordinated with RMC Reg Maint Center
- BRAC Requirement
  - Closing of facilities
  - Realigning of mission workloads

BRAC IMPLEMENTATION ACTIONS

NAVAL AVIATION SYSTEMS TEAM

- MAR 93 AIR-04D Established
  - Select a Program Manager/Deputy
  - Formalize position in NAVAIR Structure
- APR 93 BRAC Depot Advisory Group
  - Put together a team of experts
  - Define scope of project
  - Define organizational requirements
- MAY 93 BRAC Process Specification
  - Define all processes, functions, tasks
  - Organize all processes, functions, tasks (WBS)
  - Schedule all processes, functions, tasks
- JUN 93 BRAC Implementation Teams Formed
  - Virtual organization
  - Site and Headquarters levels
  - Assign responsibilities
  - Names and Phone Nrs. in all WBS categories

CLOSURE SCHEDULE

NAVAL AVIATION SYSTEMS TEAM

NADEP	CEASE PRIMARY MISSION OPERATIONS	CLOSURE IMPLEMENTED
PENSACOLA	SEP 95	MAR 96
NORFOLK	SEP 96	MAR 97
ALAMEDA	SEP 96	MAR 97

CEASE PRIMARY MISSION OPERATIONS - Date on which all productive workload has been transitioned to other locations, no direct work-in-process is left in the plant, and there is no longer a requirement to be a DBOF activity.

CLOSURE IMPLEMENTED - The date which the NADEP officially turns the facility over to the Host Station or NAVFAC.

EXECUTIVE SUMMARY

NAVAL AVIATION SYSTEMS TEAM

OBJECTIVES

* MAINTAIN FLEET SUPPORT
* ACHIEVE NADEP OPERATIONAL AND FACILITY CLOSURES ACCORDING TO BASE CLOSURE ACT II

STATUS

* PENSACOLA AIRCRAFT AND COMPONENT TRANSITIONS COMPLETE EXCEPT FOR DYNAMIC COMPONENTS AND ROTOR BLADE DET
* WORK AROUNDS/STOP GAP MEASURES AT NORFOLK AND ALAMEDA
* CONTINUOUS TRANSITION PLANNING AND PROCESS DEVELOPMENT

CHALLENGES/AREAS OF CONCERN

* INADEQUATE/CHANGING FUNDING PROFILE
* BACK UP DEPOTS FOR COMMERCIAL COMPONENTS
* HIGH ATTRITION/SKILL IMBALANCES AT CLOSING DEPOTS
* HIRING SKILLED PERSONNEL AT GAINING DEPOTS

WORKLOAD TRANSITION

NAVAL AVIATION SYSTEMS TEAM

AIRFRAMES

* 8 TYPE-MODEL PRODUCT LINES TRANSITIONING
  * VIRTUAL TRANSITION/STOP GAP MEASURES
  * MINIMAL PREDICTED FLEET IMPACT
  * FLEXIBLE SCHEDULE

ENGINES

* 3 PRODUCT LINES TRANSITIONING
  * FLEXIBLE SCHEDULE
  * ACHIEVABLE/MANAGEABLE
  * MINIMAL PREDICTED FLEET IMPACT

COMPONENTS

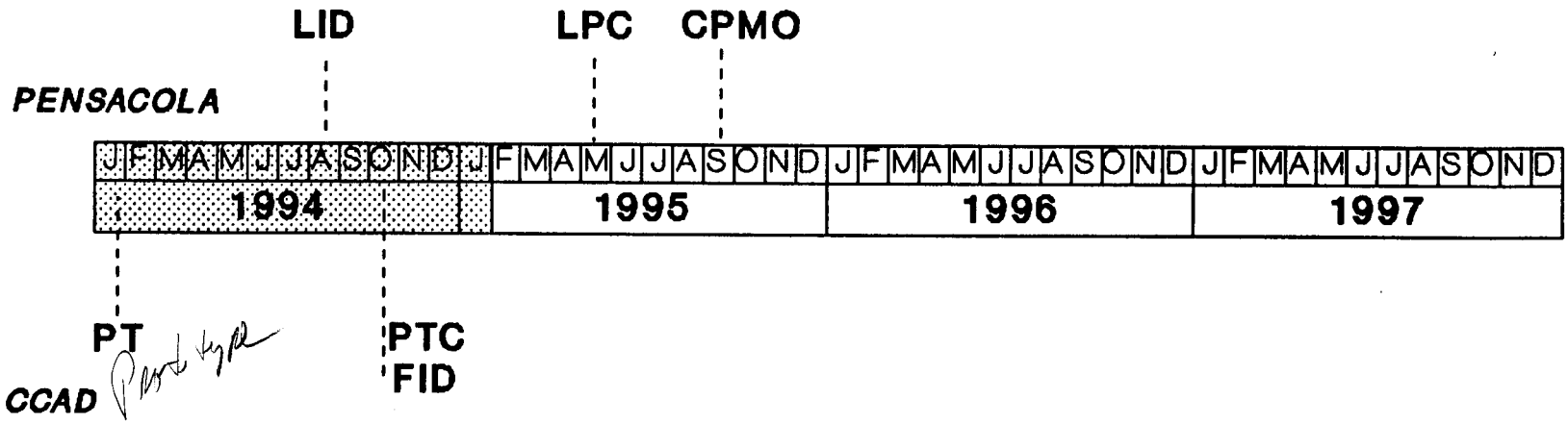
* APPROX 21,095 CAPABLE (ACTIVE/INACTIVE) PRODUCTS TRANSITIONING AT CLOSING SITES
  * HIGH VOLUME
  * BROAD SCOPE
  * COMPLEX MANAGEMENT PROCESS
  * COMPLEX TECHNICAL REQUIREMENT
  * POTENTIAL FLEET IMPACT

NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

SH-60B



PROTOTYPE BUNO 161557
COMPLETED 10/7/94

FID-BUNO 163907
INDUCTION DATE 10/18/94
10% COMPLETED
EST. COMPLETION DATE 4/6/95

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

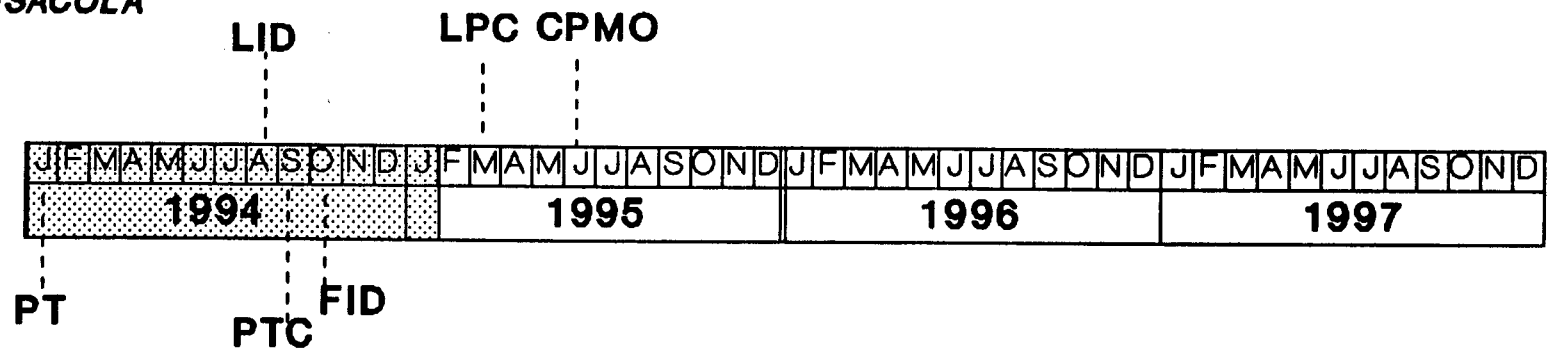
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

AH-1W

PENSACOLA



CCAD

PROTOTYPE BUNO 160113
COMPLETED 9/12/94
FID-BUNO 162542
INDUCTION DATE 10/20/94
10% COMPLETED
EST. COMPLETION DATE 4/10/95

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

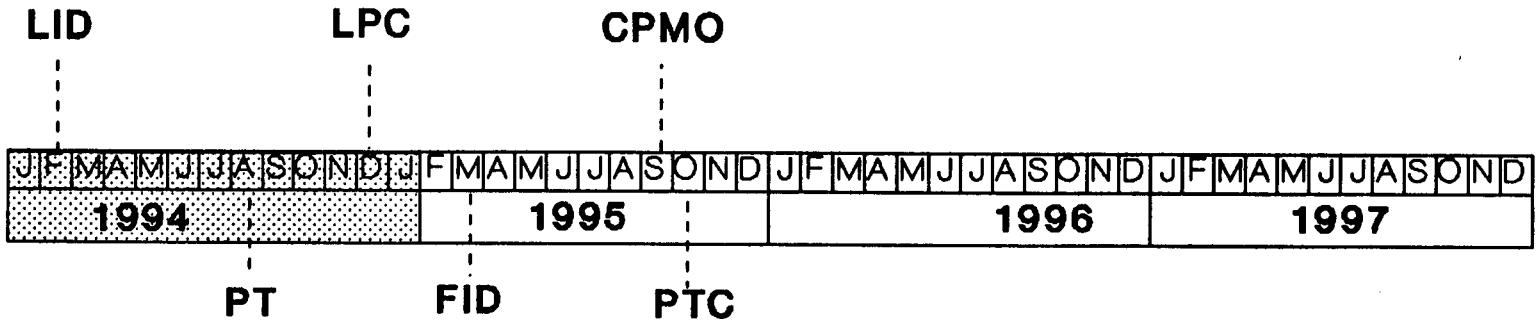
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

RH-53D

PENSACOLA



CHERRY POINT

PROTOTYPE BUNO 158749
INDUCTED 8/12/94
EST. COMPLETION DATE 10/11/95
45% COMPLETE

FID-BUNO UNKNOWN
INDUCTION DATE 3/8/95
EST. COMPLETION DATE 4/29/96

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

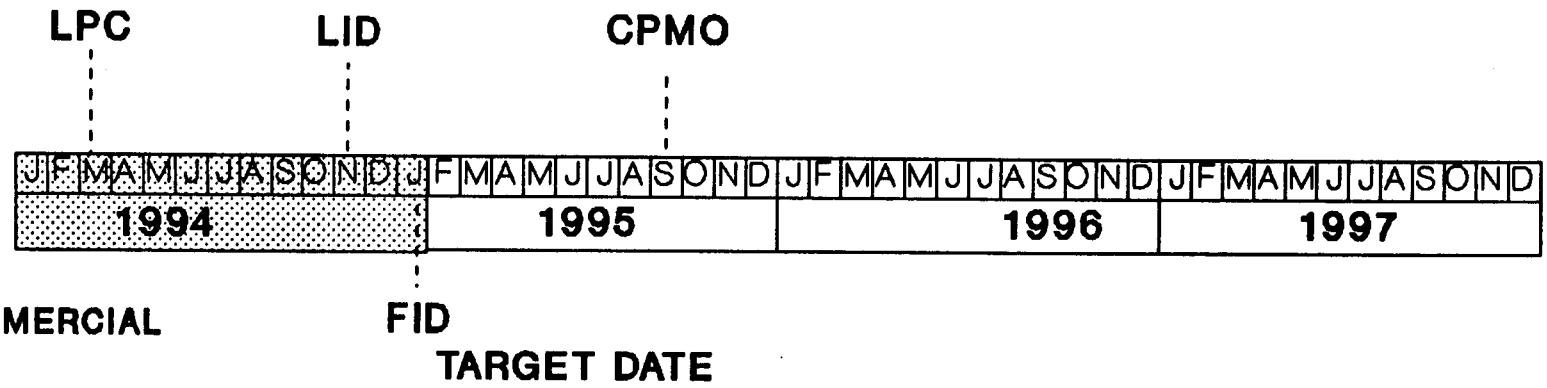
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

H-3

PENSACOLA



AWARDED 11/9/94
PEMCO AEROFLEX INCORP.
FID-BUNO UNKNOWN
INDUCTION DATE 2ND QTR 95
EST. COMPLETION DATE UNKNOWN

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

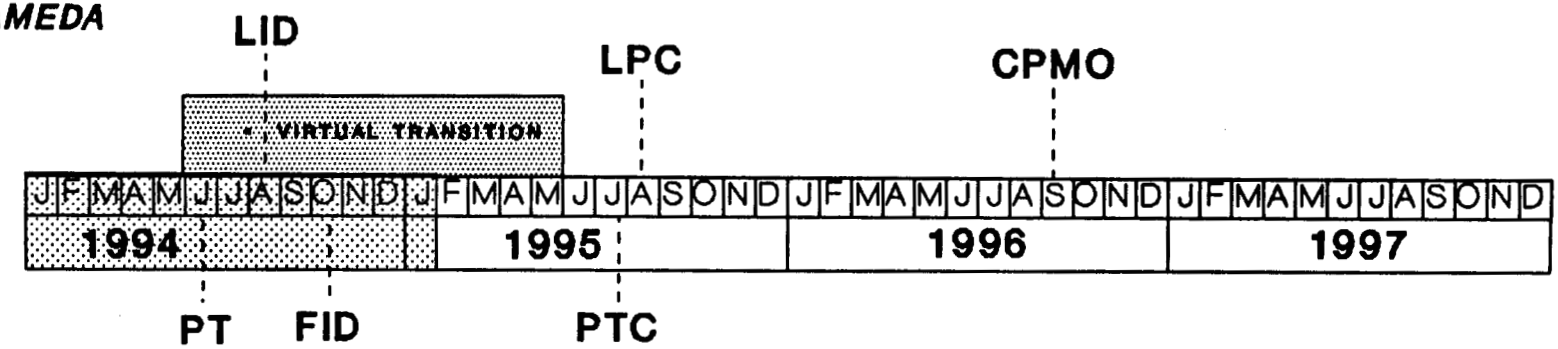
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

S-3B

ALAMEDA



NORTH ISLAND

* ACFT are being worked at Alameda

PROTOTYPE BUNO 159409
INDUCTED 6/22/94
EST. COMPLETION DATE 7/15/95

FID-BUNO 159751
INDUCTION DATE 10/14/94
50% COMPLETED
EST. COMPLETION DATE 10/14/95

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

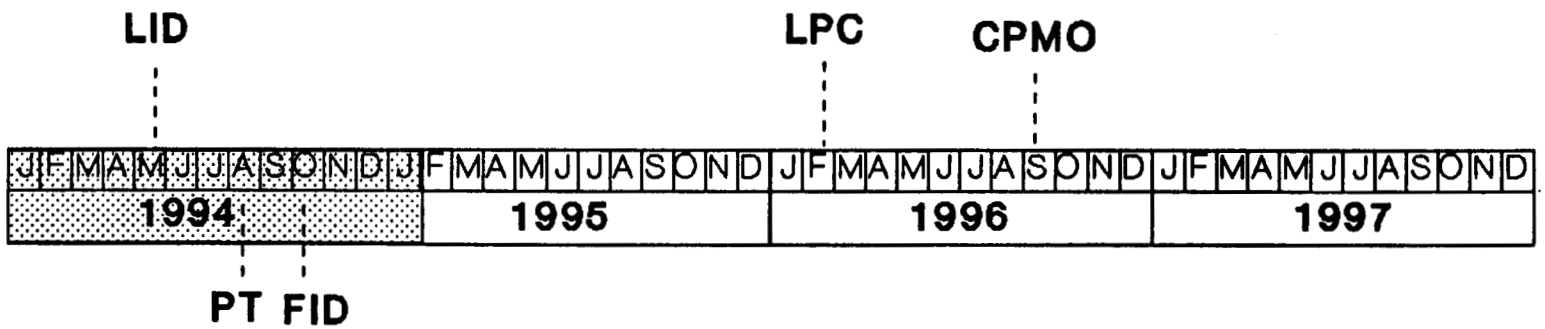
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

EP-3 ARIES

ALAMEDA



JACKSONVILLE

PROTOTYPE SCHEDULED AT JAX 2ND QTR FY95

FID-BUNO UNKNOWN
INDUCTION DATE 4TH QTR 95
EST. COMPLETION DATE UNKNOWN

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

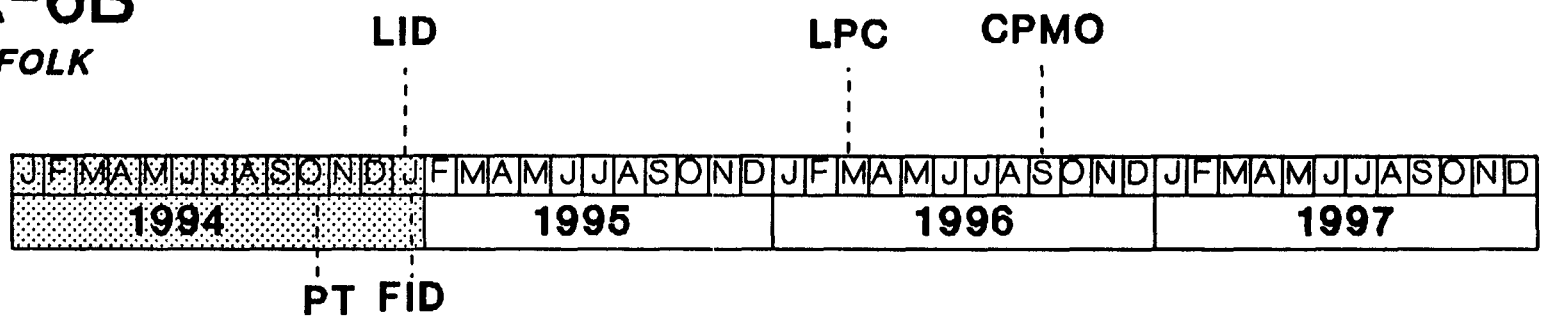
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

EA-6B

NORFOLK



JACKSONVILLE

PROTOTYPE-BUNO 159548
INDUCTED 10/3/94
FID-BUNO UNKNOWN
INDUCTION DATE 1/24/95
EST. COMPLETION DATE N/A

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
LID - LAST INDUCTION DATE
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

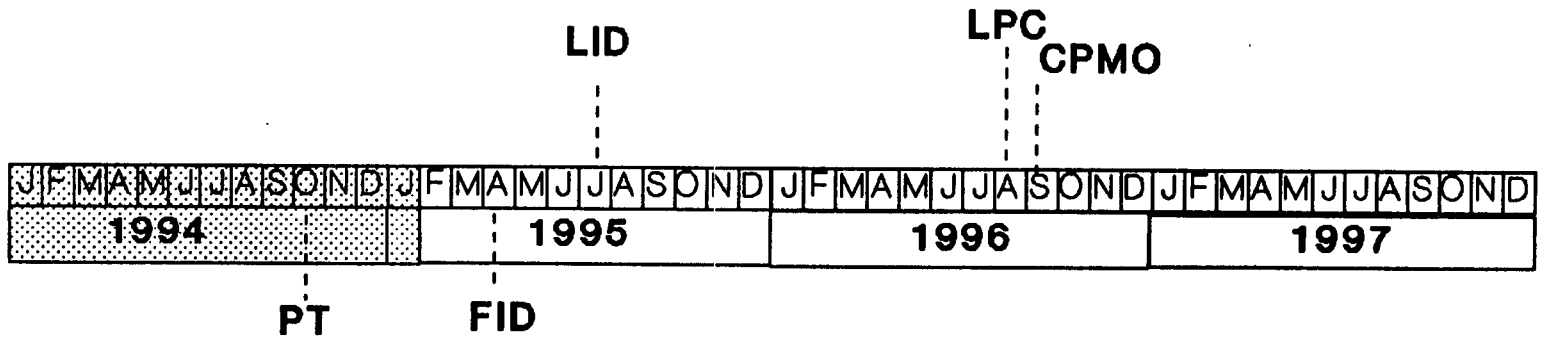
NADEP BRAC IMPLEMENTATION

AIRCRAFT TRANSITION

NAVAL AVIATION SYSTEMS TEAM

F-14

NORFOLK



JACKSONVILLE

PROTOTYPE BUNO 161162
INDUCTED 10/3/94
FID-BUNO UNKNOWN
INDUCTION DATE 3RD QTR 95
EST. COMPLETION DATE N/A

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
LID - LAST INDUCTION DATE
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

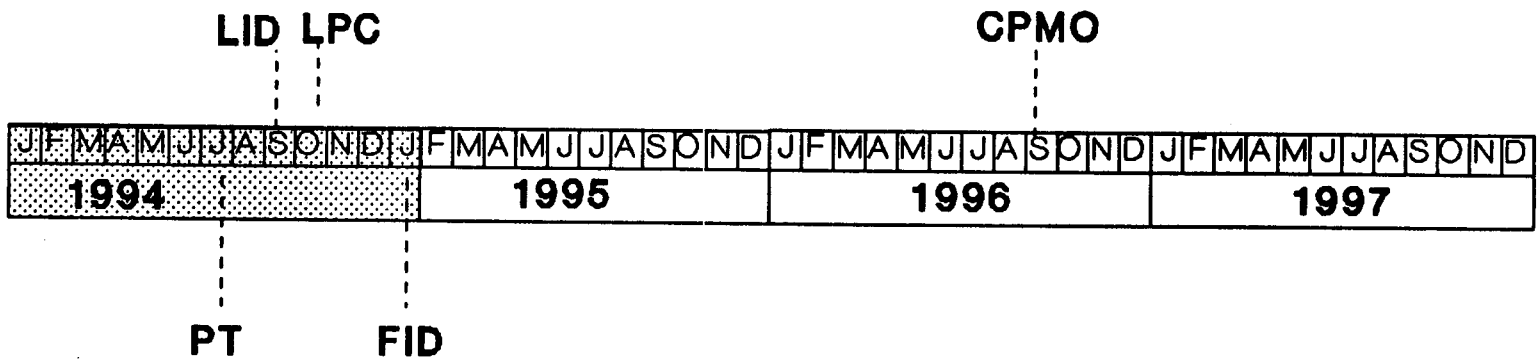
NADEP BRAC IMPLEMENTATION

ENGINE TRANSITION

NAVAL AVIATION SYSTEMS TEAM

501K-17

ALAMEDA



SAN ANTONIO ALC

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

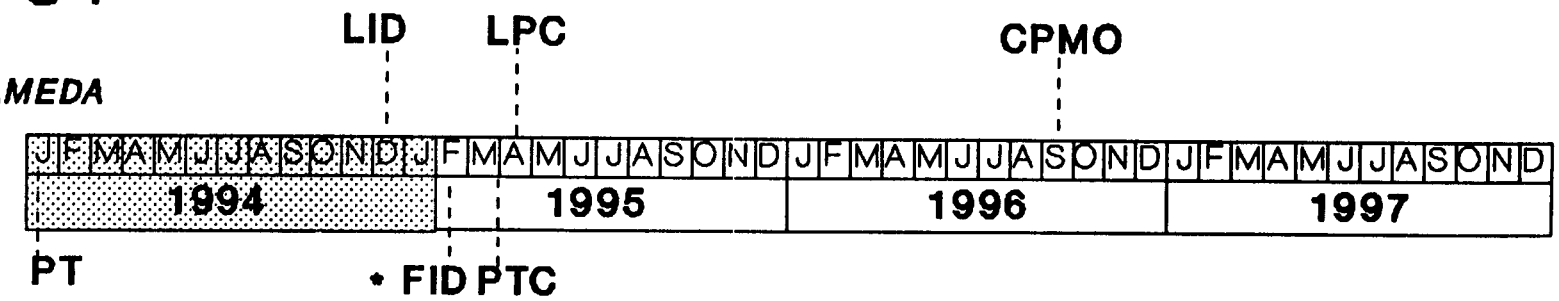
NADEP BRAC IMPLEMENTATION

ENGINE TRANSITION

NAVAL AVIATION SYSTEMS TEAM

TF34

ALAMEDA



JACKSONVILLE

- Full capability on core engine March 95. In the interim, Alameda will supply components until Jacksonville is capable (June 95 target).

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO- CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

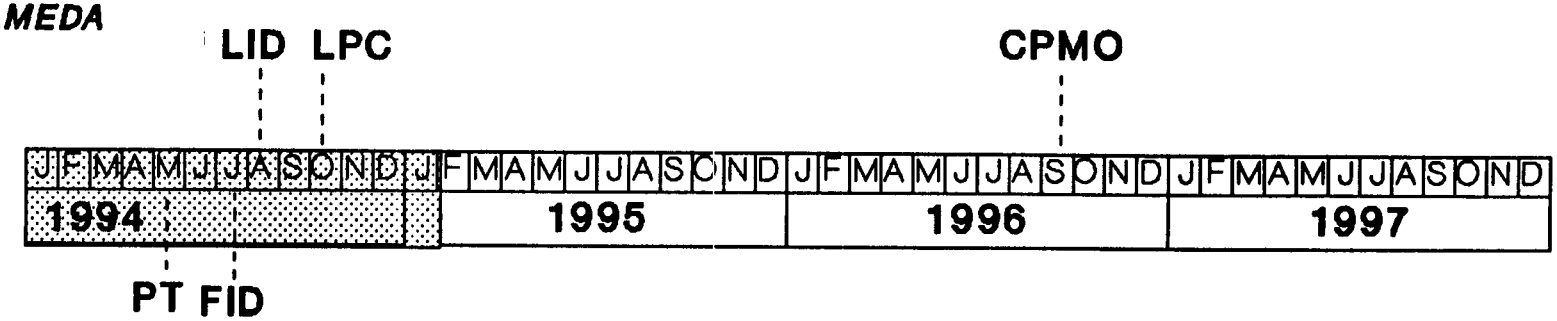
NADEP BRAC IMPLEMENTATION

ENGINE TRANSITION

NAVAL AVIATION SYSTEMS TEAM

T56-14/16

ALAMEDA



SAN ANTONIO ALC

INDUCTED 5/23/94

PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

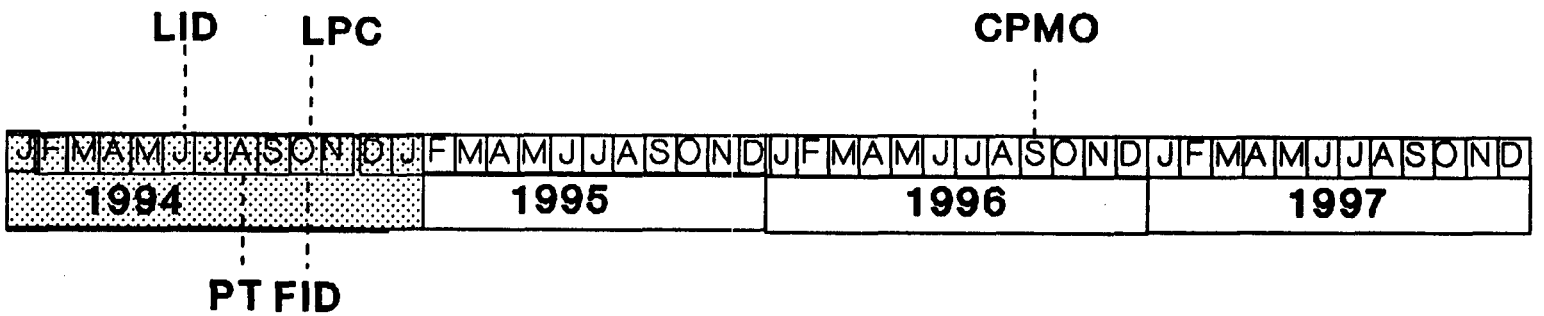
NADEP BRAC IMPLEMENTATION

ENGINE TRANSITION

NAVAL AVIATION SYSTEMS TEAM

T56-425

ALAMEDA



SAN ANTONIO ALC

INDUCTED 6/27/94

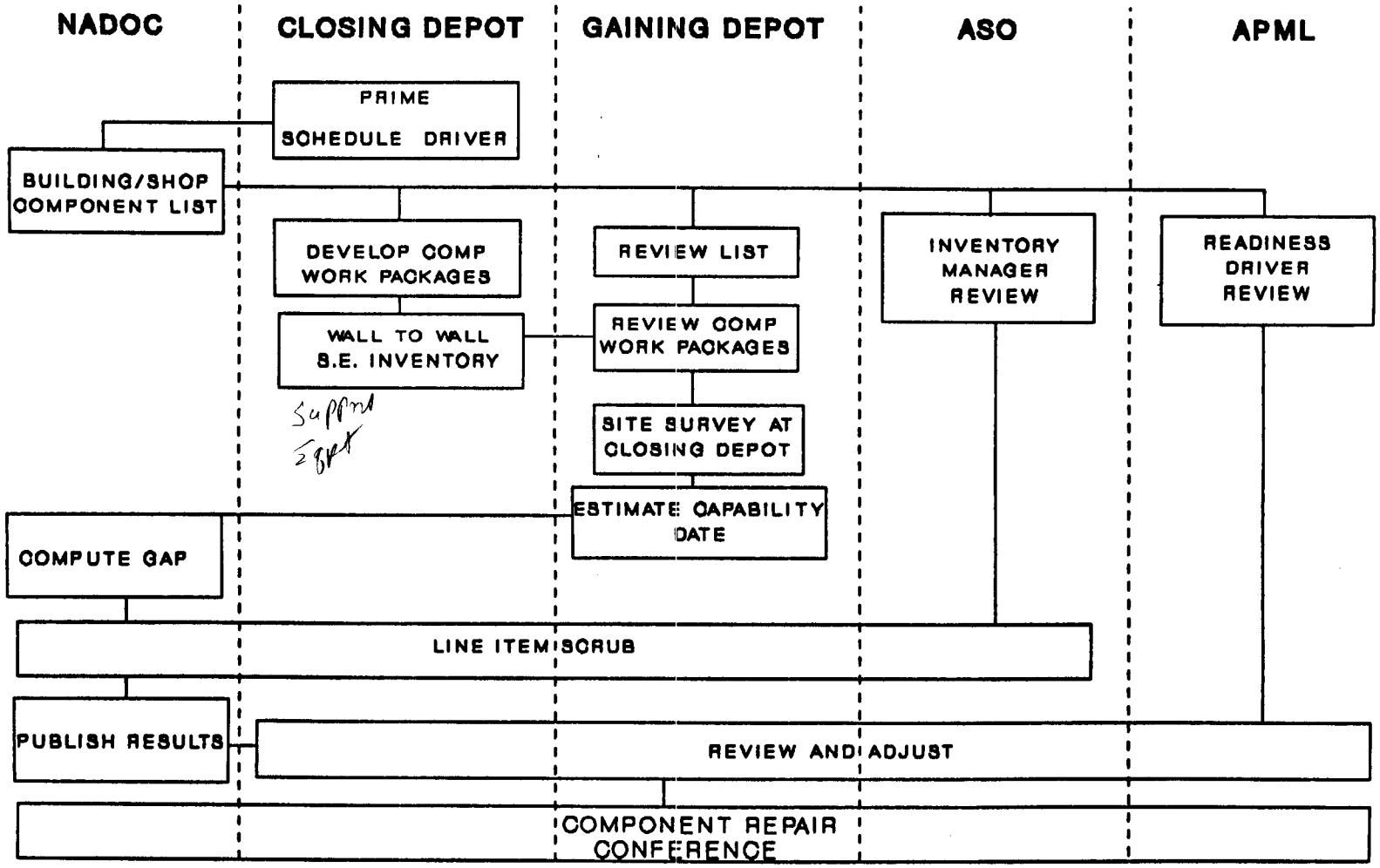
PT - PROTOTYPE
PTC - PROTOTYPE COMPLETED
FID - FIRST INDUCTION DATE
LID - LAST INDUCTION DATE
LPC - LAST PRODUCTION COMPLETED
CPMO - CEASE PRIMARY MISSION OPERATIONS

SCHEDULING INFORMATION CURRENT AS OF 2/7/95

NAVAL AVIATION SYSTEMS TEAM

NADEP BRAC IMPLEMENTATION
COMPONENT TRANSITION

Component Transition Planning Process



COMPONENT TRANSITION STRATEGY

NAVAL AVIATION SYSTEMS TEAM

GENERAL POLICY

* NAVY CORE COMPONENTS TO DOD ORGANIC ACTIVITIES
* DOD CORE THAT IS NAVY NON-CORE TO INTERSERVICE
* DOD NON-CORE TO COMMERCIAL

METHODOLOGY

* IDENTIFY CRITICAL AND HIGH VOLUME SINGLE SITE COMPONENTS
  - RETAIN IN PLACE
  - BUILD STOCK ASSETS
  - TRANSITION
* PHASE DUAL SITED

NAVY ORGANIC STRATEGY

* TRANSITION COMPONENTS IN SUPPORT OF CELLS
* TRANSITION NON-CELL COMPONENTS IN ALIGNMENT WITH PLATFORMS

TRANSITION RESPONSIBILITIES

NAVAL AVIATION SYSTEMS TEAM

CLOSING DEPOTS

* BECAUSE THE CLOSING SITE IS THE ONLY CAPABLE SITE FOR SINGLE SITED WORK, THE RESPONSIBILITY FOR RESOLUTION OF DEFICITS CAUSED BY PRODUCTION GAPS RESTS WITH THE CLOSING SITE.

* THE CLOSING SITE IS EXPECTED TO TAKE THE LEAD IN RESOLVING DEFICITS, COORDINATING WITH THE GAINING SITE ONLY WHEN LOCAL RESOLUTION CANNOT BE ACCOMPLISHED.

* CLOSING AND GAINING SITES ARE EXPECTED TO CONSIDER ALL ALTERNATIVES, SELECTING THE BEST OPTION FOR CONTINUED FLEET SUPPORT.

BIT MANAGER RESPONSIBILITIES

NAVAL AVIATION SYSTEMS TEAM

CLOSING SITES

* COMPLETE WALL-TO-WALL INVENTORY
* PREPARE TECHNICAL DATA PACKAGES
* ESTABLISH FIRM SE/PSE SHIP DATES
* ESTABLISH FIRM LAST INDUCTION DATES
* DISESTABLISH CAPABILITY

GAINING SITES

* CONDUCT SITE SURVEYS
* RECEIVE TECHNICAL DATA PACKAGES
* RECEIVE SE/PSE SHIP DATES
* ESTABLISH FIRM FIRST INDUCTION DATES
* ESTABLISH/CERTIFY CAPABILITY

TRANSITION RESPONSIBILITIES

NAVAL AVIATION SYSTEMS TEAM

TO BE DECIDED BETWEEN CLOSING & GAINING SITES:

* INCREASE EXECUTION SCHEDULES AT CLOSING SITE
* USE IN-HOUSE CONTRACT TEAMS AT CLOSING SITE
* DELAY LID OR ACCELERATE FID
* DISPATCH DEPOT FIELD TEAM TO GAINING OR CLOSING SITE
* PROVIDE CFA OR DEPOT FIELD TEAM ASSISTANCE TO "I" LEVEL
* USE INTERIM CONTRACT SUPPORT

ASO REPAIR PROGRAMS STRATEGY

NAVAL AVIATION SYSTEMS TEAM

- Identify and focus transition resources on "Active" components (Readiness Drivers)
- Move Non Core component workload to private industry, rightsizing Navy organic depots.
- Partner with the Naval Aviation Systems Team NAVAIR, NADOC, NADEP's and ASO

ASO REPAIR PROGRAM TACTICS

NAVAL AVIATION SYSTEMS TEAM

- Single site dual sited items to allow for orderly move of support equipment
- Prioritize readiness impact components using default gap (2 quarters)
- Work with closing and gaining depots to adjust last and first induction dates to minimize transition impact
- Establish "bridge contracts" where possible (last resort)

SUMMARY

NAVAL AVIATION SYSTEMS TEAM

* AIRFRAMES, ENGINES AND SUPPORT SERVICES MANAGEABLE TRANSITIONS

* MANAGEMENT EMPHASIS ON COMPLEX COMPONENT TRANSITIONS

* FUNDING SITUATION IS CONSTANTLY CHANGING

* BRAC FUNDING IS A CONTINUING CONCERN

* AWAITING BRAC-95 INPUTS