“Move Your Cheese Now!”

Captain Fred Cleveland, USN
Commanding Officer
Who We Are---FRC Southwest

- Fix it once
- Fix it right
- Fix it on time
What We’re Doing

Alignment

Focus on Innovation
That amplifies by leveraging
aligned goals

Sec Nav Priorities
- Optimize the Workforce
- Prosecute the GWOT
- Build the Navy-Marine Corps for Tomorrow
- Emphasize Safety, Manage Risk
- Reinforce Ethics
- Lean/Six Sigma

CNO Priorities
Mission Accomplishment
- Sustain Combat Readiness
- Build a Fleet for the Future
- Develop 21st Century Leaders

NAE/NAVAIR Goals
- Balance Current and Future Readiness
- Reduce the Cost of Doing Business
- Enhance Agility
- Improve Alignment
- Implement Fleet-Driven Metrics

Depot Priorities
- Alignment
- Cycle-Time Reduction
- Reliability
- I2D Integration
- Material Management
- Reduce Cost of Doing Business

Enterpris Alignment
FY-06 Production Results

Plan / Actual

* Helo-line:  
  (46) / (44)  H-60 IMC aircraft  
  (59) / (59)  H-1 IMC aircraft,  
  (9) / (8)    H53 IMC aircraft

* E-2/C-2:  
  (9) / (7)    E-2 aircraft  
  (9) / (8)    C-2 aircraft

* F/A-18:  
  (53) / (47)  PMI-1s  
  (32) / (32)  PMI-2s  
  (13) / (11)  Crash Damaged aircraft  
  (13) / (7)   CBR+ aircraft  
  (3) / (3)    "E/F" AEPD aircraft

* Field Service:  
  (25) / (23)  EA-6B IMC aircraft  
  (6) / (6)    AV-8 IMC aircraft

• Components:  
  39,159 / 34,279 Units  
  3,813 / 3,460    PBL units  
  3,591 / 3,000    DMISA units  
  1,235 / 829      FMS units  
  28,164 / 24,990  FE units  
  154 / 126       42 units  
  2,202 / 1,874    Concurrent units

* LM2500 Engines:  
  (10) / (13)

* Mobile Facilities:  
  (57) / (56)

* Calibration:  
  (14,218) / (12,850) units

* Manufacturing:  
  (1,822) / (1,644) items

Aircraft (247) - approx 94% of FY2006 plan

Components (34,279) - 88% of FY2006 plan

Ensured Commander, Naval Air Forces “Ready For Tasking” Aircraft Goals
THIS MONTH!
FLEET READINESS CENTERS (FRC)

NORTHWEST
AIMD WHIDBEY ISLAND
(Crane ALQ-99 workload)

WEST
AIMD LEMOORE
NADEP NI Det Lemoore

Site Fallon
NADEP NI Det Fallon

Site Fort Worth
AIMD Atlanta (FA-18 Support)
NAVAIRES Fort Worth

Site Pendleton
MALS-39 Pendleton
NADEP NI Det Pendleton

Site Pt. Mugu

SOUTHWEST
MALS-11 & 16 Miramar
NADEP NI Det Miramar
AIMD North Island
NADEP North Island
NADEP North Island DET NI

Site Yuma
MALS-13 Yuma
NADEP NI Det Yuma

SOUTHEAST
NADEP JACKSONVILLE
NADEP JAX Det Cecil Field
AIMD Brunswick
AIMD JAX

Site N. Orleans
AIMD Atlanta (E-2C Support)
NAVAIRES New Orleans

Site New River
MALS-26 & 29 New River
NADEP CP Det New River

Site Beaufort
MALS-31 Beaufort
NADEP JAX Det Beaufort

Site Mayport
AIMD Mayport
NADEP JAX Det Mayport
NAWCAD LKE Det Mayport

Site Key West

MID ATLANTIC
AIMD OCEANA
AIMD Norfolk
AIMD NAS Corpus Christi
NADEP CP Det Oceana
NADEP JAX Det Norfolk
NADEP JAX Det Oceana
NAWC Lakehurst Det Norfolk

Site Patuxent River

Site N. Orleans

EAST
NADEP CHERRY POINT
MALS-14 Cherry Point
AIMD Willow Grove
FRC East Det Lakehurst

Site Beaufort

Site Mayport

FLEET READINESS CENTERS (FRC)

A MAJOR TRANSFORMATION IN DELIVERY OF AVIATION MAINTENANCE!
FRCSW regularly supports 6 Pacific fleet Aircraft Carriers while in-port or at sea. We also resource numerous long and short-term detachments at many sites around the country and the globe. The FRCSW team provides immediate worldwide Warfighter support wherever and whenever needed!
The Naval Aviation Enterprise... 
Transforming into Fleet Readiness Centers

"I2D"

INTEGRATION –
More than just a “Hand Off”

On site Artisan skills allows for increased capability by leveraging infrastructure and technology.
Facilitates positive upstream impacts that transcend the NAE

More “Move your cheese now!”
A Simple FRC Principle

Don’t Do Stupid Stuff!

Remove at squadron
Order/Wrap
Unwrap Screen at IMA
BCM at IMA Pack/Wrap/Ship At ASD
Stow/Unstow at DDDC
Pickup by ASD
Detrash/Induct at D Condemn!
Lemoore
- Radar BCM Interdiction Team
  - Number to Date: 1
    - APG-65 Pwr Supply Converter
  ✓ Value to FHP: $4,601
  - RFTF Bench Round Robin: 1
  - Composites, Hydraulic, Avionics Interdictions
    - Number to Date: 44
    ✓ Value to FHP: $383,179

Pt. Mugu
- Finalizing BCM Analysis
- 3-artisans planned for support

NORIS Petri Dish:
- AirsSeed Plans in Final (Avionics)
- BCA with Reserves week of June 6
- BCM Interdictions
  - Number to Date: 51
  ✓ Value to FHP: $159,597

Whidbey Island
- Canopies, EA-6B Flight Controls, P-3 Components

FY06 BCM Interdictions: up 41% from FY2005
✓ Value to Flying Hour Program: $10,433,021
✓ To date 344 items (51% more units)
AIRSpeed/LEAN Success Stories

• Phase 1, Visual Synchronization provided reduction in cost by 18% down by 1744 man-hours

• Phase 2, Single Piece Flow reducing TAT by 33% to 120 Days

• Quality Reduction in MAF per man-hour down by 29% from first half of year
E-2/C-2 - Single Piece Flow

Synchronized Pull system based on Fleet Flightline Requirement
E-2/C-2 Local Mfg BB Project
Touches All Areas of NAVAIR NI

Eng/Log Support

Eng/Log

NEED AIRCRAFT PART

ID & Approve Needed AC Part
E2/C2 6.0 GB
Denise Brent
Ct Reduction from 5 days to 1 day with Savings in Prod work hrs

Local Mfg Request Devel.
NAVSUP GB
LCDR Ken Flaherty
Ct reduction from 16 days to 4 days with Savings in Transaction fees

MFG Planning Process / Approval
MFG 6.0 GB
NAVSUP GB
JW Flaherty
CT reduction from 8 days to 3 days with Savings in Man Hrs/Wk Years

Procurement of Materials/Tools
MFG 6.0 GB
LCDR Ken Flaherty reduction from 8 to 4 days with Savings in Transaction fees

Forwarding and Accumulation
MFG 6.0 GB
John Rubio
CT reduction from 18 days to 4 days with Savings in Man Hrs

Pilot Complete - Replication on F-18, Implementation on all E-2/C-2
MFG Planning Before and After Lean/Six Sigma

**Process Capability of 13 O from DtoArtisan**
Calculations Based on Lognormal Distribution Model

- **USL**: 15.0
- **Sample Mean**: 8.47222
- **Sample N**: 36
- **Location**: 1.90643
- **Scale**: 0.39403
- **Z.Bench**: 1.20
- **Z.LSL**: *
- **Z.USL**: 0.29
- **Ppk**: 0.10
- **Exp Overall Performance**
  - PPM<LSL: *  
  - PPM>USL: 194444
  - PPMTotal: 194444

**Observed Performance**
- PPM<LSL: *
- PPM>USL: 194444
- PPMTotal: 194444

**Before Lean/Six Sigma** – Process was 20% capable of Meeting 15 Day TAT

**After Lean/Six Sigma** – Process Is 80% Capable of meeting 15 Day TAT
## FY-06 AIRSpeed Yield Summary

<table>
<thead>
<tr>
<th>Aircraft Lines</th>
<th>Labor Hours</th>
<th>Flightline Inventory/Cycle Time</th>
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<tbody>
<tr>
<td></td>
<td>Down 20% - $1.9M Execution</td>
<td>At or Above Entitlement</td>
</tr>
<tr>
<td>F-18 PMI-1</td>
<td></td>
<td></td>
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<tr>
<td>H-1</td>
<td>Down 10%</td>
<td>WIP Reduction</td>
</tr>
<tr>
<td></td>
<td>1.8M FY-07 WLS Reductions</td>
<td>8 AH-1W ($8M Inv)</td>
</tr>
<tr>
<td>E-2/C-2</td>
<td>C-2 SLEP APN-5 Reductions</td>
<td>C-2 @ F/L (Adding Re-wire for 30 Days C/T)</td>
</tr>
<tr>
<td></td>
<td>2K Hours Re-wire, 1.5K Hours</td>
<td>E-2 Gap Driven by Mods</td>
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<tr>
<td></td>
<td>SLEP</td>
<td></td>
</tr>
<tr>
<td>CH-53</td>
<td>At WLS</td>
<td>Was over 300 days, delivered last aircraft at 218 days,</td>
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<tr>
<td></td>
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<td>driving towards 175 days over next three aircraft w/Current</td>
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<td>Staffing</td>
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<td></td>
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<td>50% Reduction in Sheet Metal Cycle Time</td>
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<td>$10.4M Repair Interdiction Savings</td>
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</tbody>
</table>
F/A-18 PMI-1/CBR+ Lean Effort
E2/C2 PMI-2/PMI-3 SLEP Lean Effort
CH-53, H-1, H-60 Lean Effort
Components Lean Effort

Process Axis
Product Axis

F/A-18 Manufacturing BB Project
E2/C2 Manufacturing BB Project
BOM Improvement Projects
Manufacturing Lean Effort
Business Unit Material Ordering Projects

Connect the dots in the value chain!!
Focus for Innovation

• Weak Signal Management
• Industrial Information Technologies
• Accelerated Supply Chain
• Coherent Human Capital
• Relevant Technology
Fleet Readiness Center Southwest

Strategically Positioned to Support our Navy and USMC Warfighter's

A National asset, providing flexible, responsive, integrated maintenance solutions and cost-wise readiness to our nation’s Warfighters