



NWS Director Briefing

FY 2013 Implementation Plan for Training and Education

July 12, 2012



Outline



- **Recent Successes**
- **IP13 Priorities:**
 - **Activities Funded**
 - **Budget Assumptions/Activities Not Funded**
- **Summary**
- **Background**



Recent Successes in Training Division



- **Dual-Pol Training**

- ***NWS substantially ahead** of the HPPG Forecaster training schedule*
- *Storm-of-the-Month Webinars showing immediate impact of Dual-Pol training on issuance of life-saving forecasts and warnings*
- *Focused "just in time" maintenance training prior to deployment*

- **AWIPS 2 Training**

- *TD has successfully adapted to multiple system changes to deliver timely and high quality maintenance and user training prior to and during deployment*

- **Increasing use of extensive online libraries at Commerce Learning Center and COMET[®]/MetEd (average 60,000 NWS completions per year)**



IP13 Priorities



Top Two Priorities:

- Train electronics staff
 - Maintain NWS-unique equipment and software
- Train forecasters with warning and forecast responsibilities:
 - Use Dual-Pol radar
 - Issue severe weather warnings



IP13 Training Addressing Service Assessments



Service Assessment Action	Solution Title	Target Audience
Mother's Day Weekend Tornadoes of 2008	Communicating Risks in High Impact Events	NWS Forecasters, esp. WCMs, SOOs, ERMs, and ERSs
Nashville Floods 2010	Recognizing High Impact Hydrologic Events	NWS Forecasters with Flash Flood Watch/Warning responsibilities
Nashville Floods 2010	Hydrologic WES-II Simulations	WFO Forecasters with Hydrologic warning responsibilities. AHPS funded.
Historic SE Tornado Outbreak 2011	AWOC – Severe Weather Warnings	NWS Forecasters with severe weather warning decision making responsibilities
Joplin Tornado 2011	AWOC – Core Decision Making	NWS Forecasters and support staff with severe weather warning responsibilities
Historic SE Tornado Outbreak 2011 *	Advanced Damage Survey Techniques	WCMs and damage assessment staff at WFOs
Joplin Tornado 2011	DLOC	Interns/SOOs/radar Focal Points

FY 12-13 Funded	*FY13 Unfunded
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IP13 – Activities Funded



Aviation - Funded by OCWWS Aviation (\$300K):

- Space Weather for Aviation Module (4Q FY12).
- Distance Learning Aviation Course-3: Topic to be determined by training PDS team (led by Julie Adolphson & OCWWS ASB) defining priorities for CWSU, AWC and WFO with links to DSS.
- Funded by OCWWS Base: An update to NWSTC Online Aviation Operations Course to include detailed information on the National Airspace System.

Climate - No Activities Funded.

Fire Weather (\$13.5K)

- IMET Workshop for 5 new hires funded (\$8.5K)
- Local Safety Recertification Training (\$5K)

Hydrology (\$16K)

- Simulation Capabilities for RFCs (\$8K)
- CHPS Training for RFCs (\$8K)
- Hydrologic Weather Operations (staff time only)



IP13 – Activities Funded - 2



Management and Supervision (\$176K)

- 2 classes (50 students)

Marine – No Activities funded.

Numerical Weather Prediction (\$195K)

- Module Matrix update
- SOO Team determining FY13 priorities

Space Weather (Staff Time Only)

- NWSTC work with SWPC – Space Weather for WFOs module (planned 4th quarter release).
- NWSTC developing WMO Space Weather module as time permits.

Warning/Radar Operations (\$605K)

- WSR-88D DLOC course (100 new hires)
- Advanced Warning Operations Courses – Decision Making and Severe Weather
 - *Taken after DLOC to train new hires ASAP*



IP13 – Activities Funded - 3



Maintenance/Safety/Environmental Training

- Dual-Pol Maintenance (TBD) – Dual Pol funded
- WSR-88D Maintenance (3 classes)
- CRS Maintenance (8 classes) – needed due to WRIP delays
- RRS Maintenance (4 classes)
- ASOS Maintenance (4 classes) – ASOS funded
- NWR Transmitter Maintenance (Armstrong (2), Armstrong 2010 (2), Crown (3), Continental Crown (2), Nautel (2), SRS (1))
- Fall Protection Initial Training (2 classes); no recertification
- Safety Training/Environmental Compliance being converted to online, asynchronous courses



IP13 AWIPS Funded Training



- **System Admin OT&E and Deployment courses – for ESA/ITO.**
- **Linux for WFO/RFCs course – pre-requisite for System Admin training.**
- **Applications Focal Point Training modules released for Deployment.**
- **Hydro AWIPS 2 Build Updates and User Training.**
- **OST AWIPS funds CIMMS staff and travel at WDTB (5) and NWSTC (1) to develop Build training for new software releases and support the Weather Event Simulator.**



FY13 Budget Assumptions - Most Optimistic Scenario



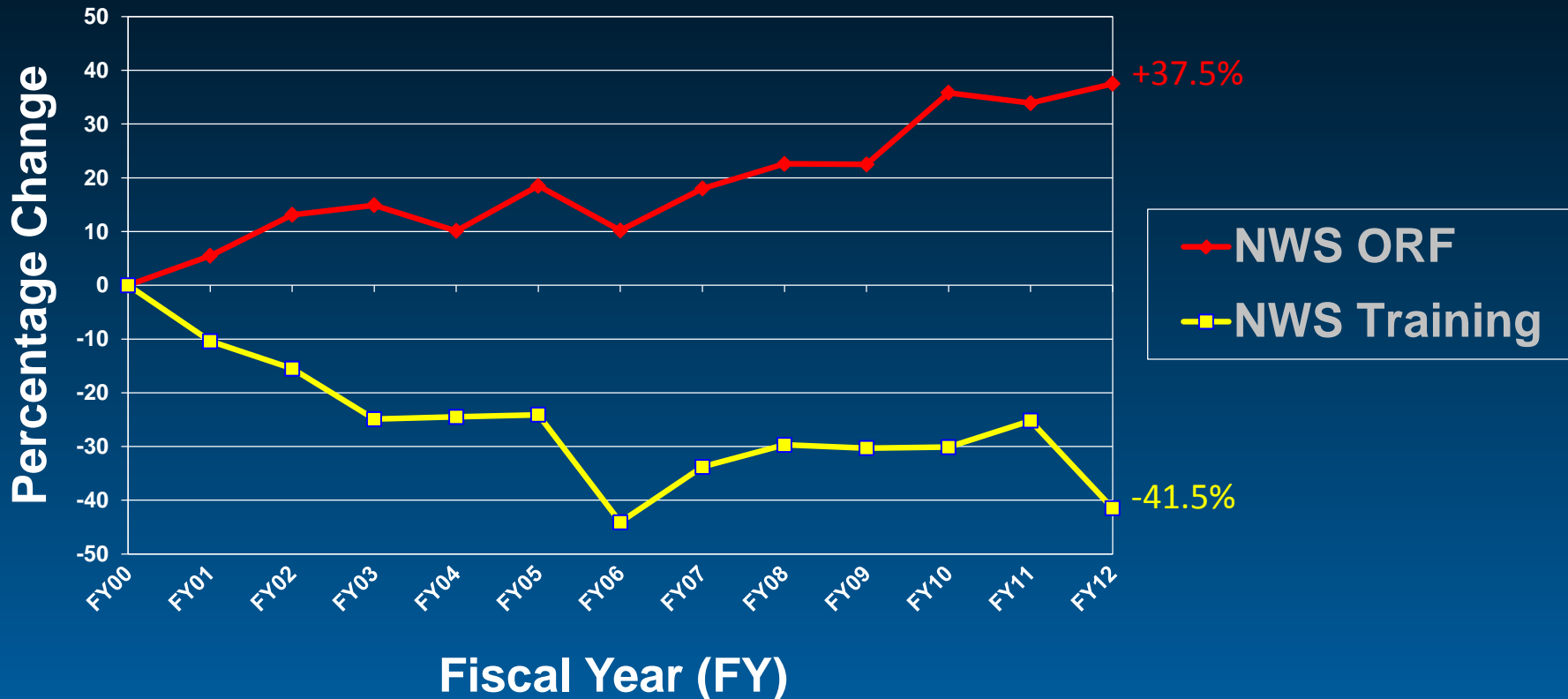
- Level-funding from OCWWS reduced base FY12 \$3,640K
- OST fully funds AWIPS-related activities for FY13
- FY12 level funding from OOS NEXRAD of \$725K
- OST & OOS funds system training (e.g. ASOS, Dual-Pol)

“If you think training is expensive, try ignorance”

-William Redding, British Author, *“The Output Oriented Organization”*, 1989



NWS ORF Budget vs. Training Budget



**Note: NWS Training includes Base, AWIPS, NEXRAD funds.
Percentage change is cumulative since end of NWS modernization.**



Critical Activities Suspended Due to Lack of Funding

Field Operations Management – management and leadership for Bargaining Unit members

WCM/SCH course – new hire WCM/SCHs

COMAP course – new SOOs

COOP/DATAC courses – running/maintaining Coop program

ELS – leadership for non-BU employees



Critical Activities Suspended Due to Lack of Funding - 2

Safety & Environmental – for WFO FPs

Fall Protection Recertification – for ETs

Climate courses (3) – for WFO climate FPs

Hydro Program Mgmt. – for SHs and Hydro FPs

Winter Wx AWOC – for Winter Storm GPRAs

Regional Training Funds – zeroed out



Summary



- **Funding erosion for Training, especially in the last two years has resulted in:**
 - Suspension of critical training areas in all Programs
 - Accelerated conversion to distance learning
 - \$5.2M of unfunded training requirements
 - No funding for new initiatives, including DSS and Weather Ready Nation
- **Remaining resources focused for success in two areas:**
 - Train ETs to maintain equipment
 - Train forecasters with forecast and warning responsibility on Dual-Pol radar and warning decision making



LESSON FROM FLIGHT 1549

**“Training is a line item
that’s easy to whack when budgets get tight,
because it’s not always easy to see
its immediate payoff.**



**That misses the
point, however.**

**Training is about
getting people ready to execute and
put their training to the test
when the organization needs it the most.”**

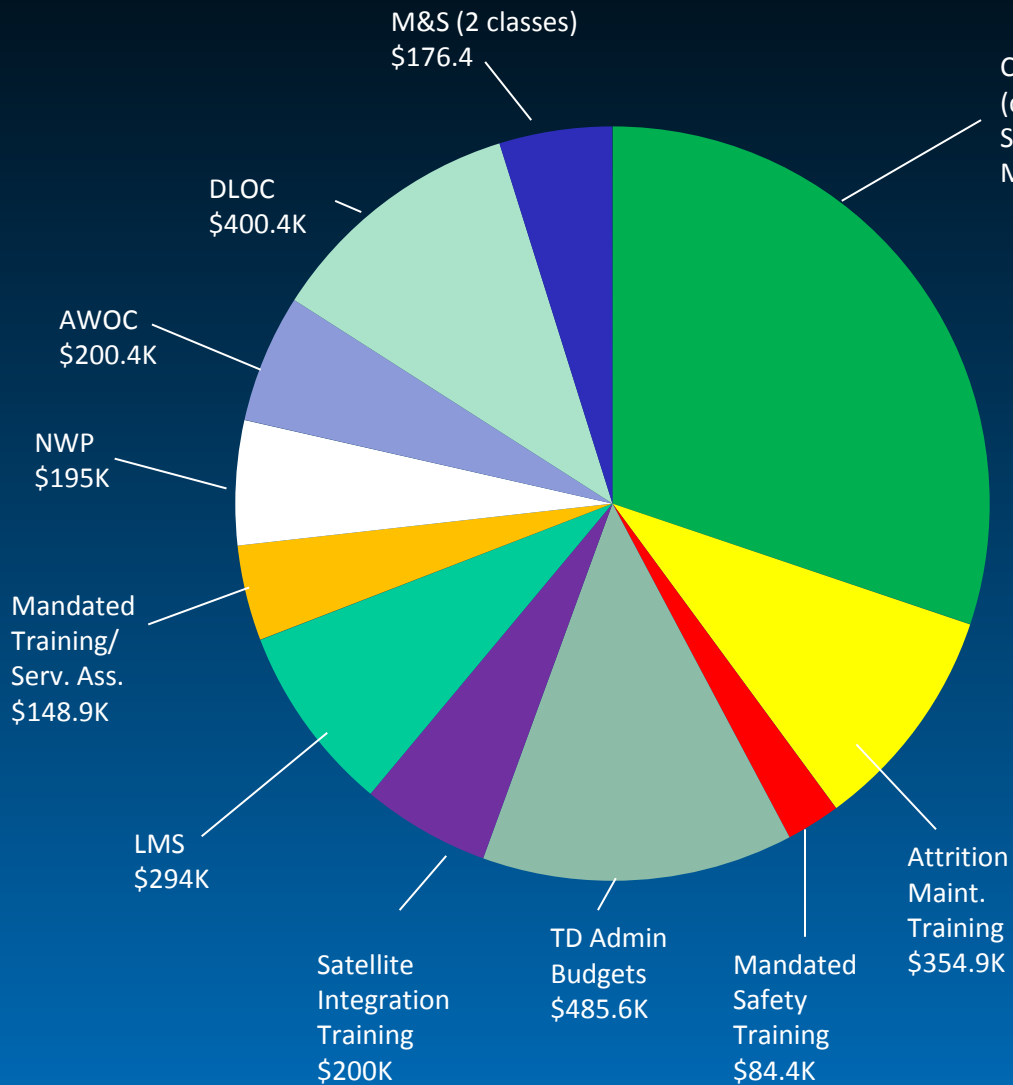
-- Chesley Burnett "Sully" Sullenberger III

Workforce Management Feb 2009

Background Slides Follow...



IP13 Base Budget Breakout

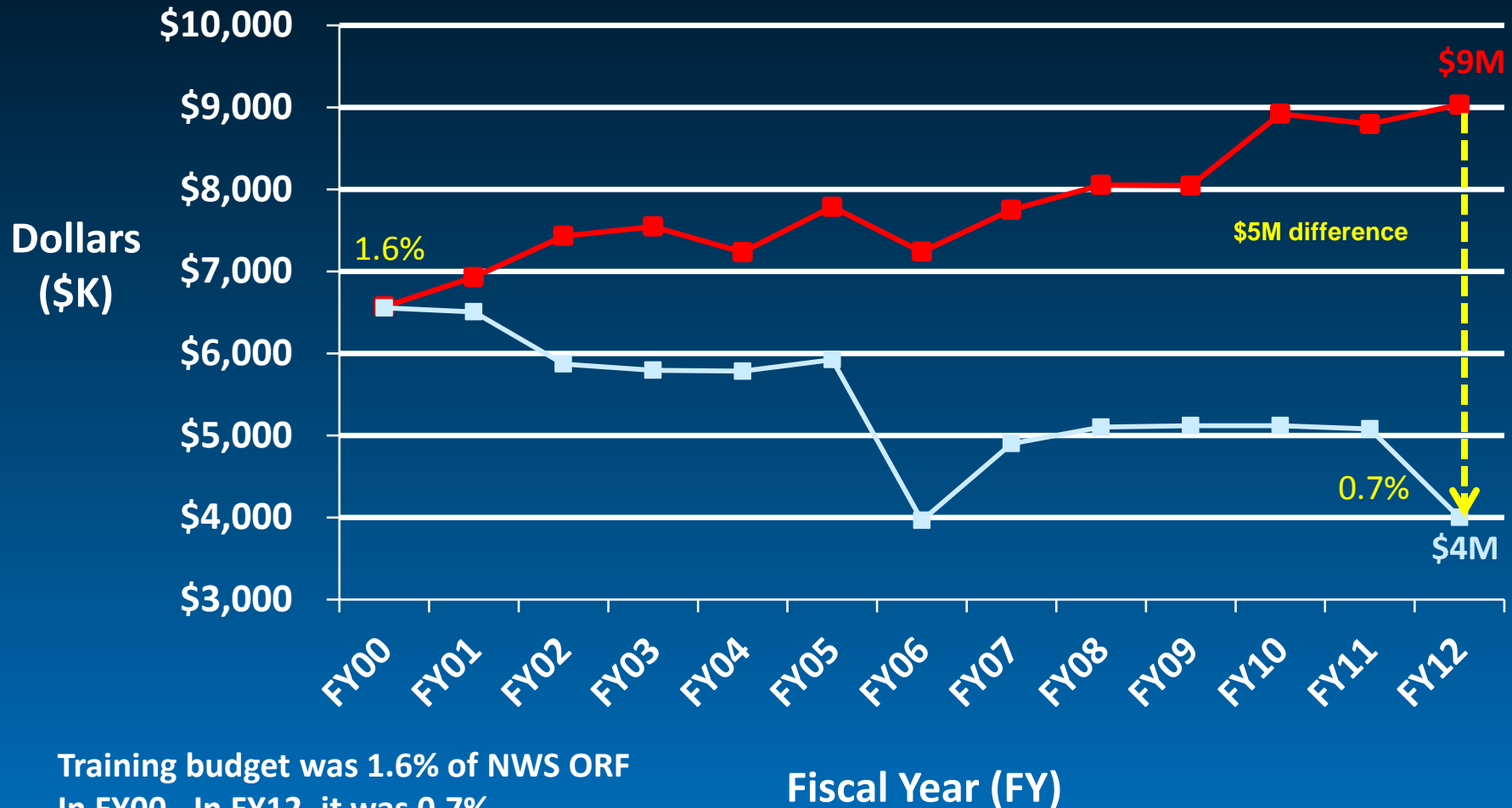


Program	\$K	%
COMET® Admin & IT	1,100	30
Attrition Maintenance Training	354.9	10
Mandated Safety Training	84.4	2
TD Admin Budgets	485.6	13
Satellite Integration Training	200	6
LMS	294	8
AWOC	200.4	6
DLOC	400.4	11
NWP	195	5
Mgmt. & Supervision Classes (2)	176.4	5
Mandated Training / Serv. Ass.	148.9	4
TOTAL	3,640	100



Base Funding of NWS Training – Since the End of NWS Modernization

■ 1% of NWS ORF in FY00 ■ Training Base





IP13 Funding Shortfall Infrastructure and Unfunded PNS

Item	Funding Needed in IP13	Actual FY13	Funding Shortfall
COMET® Operating Costs	\$1,850K	\$1,100K	\$750K
VISIT Team	\$400K	\$200K	\$200K
LMS Enhancements	\$40K	0	\$40K
Regional Training Funds	\$155K	0	\$155K
HOTG Meeting	\$15K	0	\$15K
NSTEP Meeting	\$20K	0	\$20K
TD Shortfall in Administrative Travel/Non-Travel	\$348K	\$298K	\$50K
Total Infrastructure Funding Shortfall			\$1.23M
PNS Funding Shortfall			\$5.2M
TOTAL IP13 Funding Shortfall			\$6.43M