

110 Airlift Wing

***2011 Recycling Program
Results
&
6S Recycling Pilot Project***
“Double Your Money Back”

Jan 2012

Lt Col James Shay
110 MSG/EM

2011 Recycling Program Highlights

\$18,280 in total recycling income

- *2nd highest income in last 8 years*
- *up 335% vs. 2010 (when subtracting Comm Project)*
- *Comm. Demo/Copper Recycling Project nets \$12K in income*

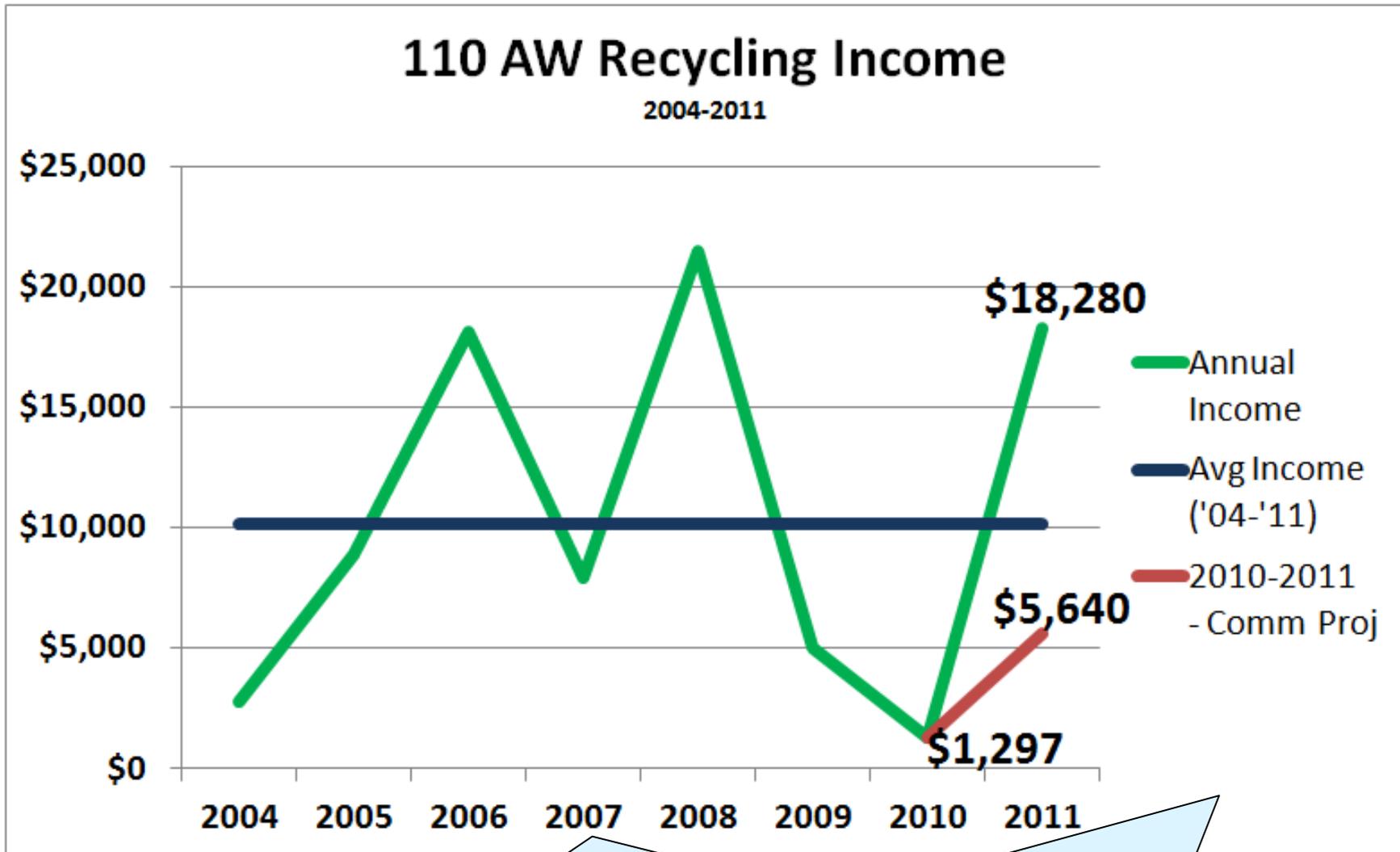
\$10,000 to Wing Morale, Welfare, & Recreation fund

6S Recycling Pilot Project Demonstrated 2X return using simple pre-sorting techniques (see below)

**Michigan RETAP Engineer, Mr. Richard Edwards, delivering results and developing new markets
@ \$0 Cost to Wing**

Zero Injuries

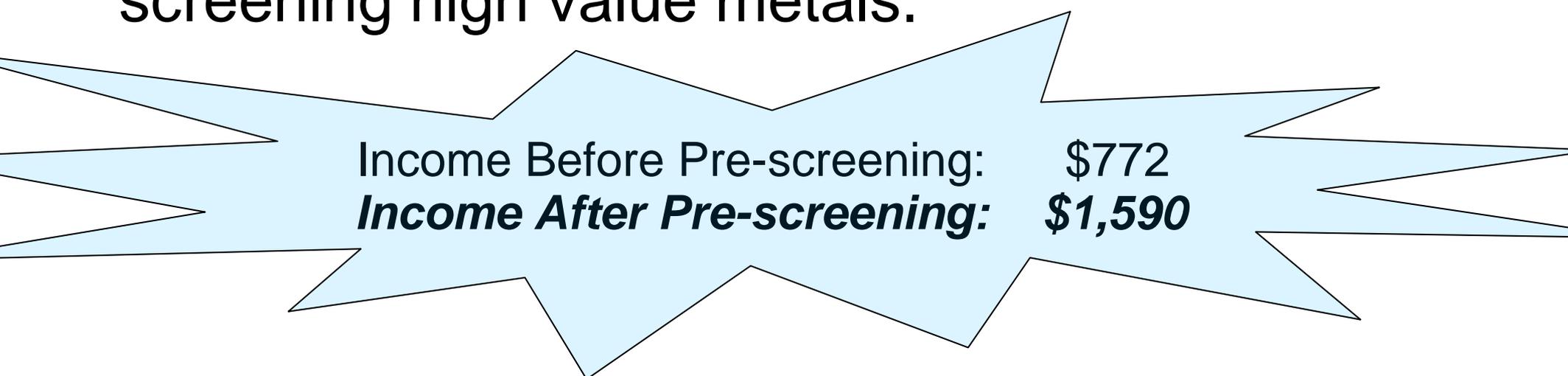
Results



2011 Recycling Proceeds – (one time) Comm Project: up 335% vs. 2010
2011 Total Recycling Proceeds: up 1,310 %, vs. 2010

6S Recycling Pilot Project

A Small 110 AW Recycling Team used Air Force “6S” Methodology to demonstrate a ***greater than 200% return*** on investment for simply pre-screening high value metals.



Income Before Pre-screening:	\$772
<i>Income After Pre-screening:</i>	<i>\$1,590</i>

Team: Lt Col Eric Oswald, Mr. Blair Clarke, 110 CES Grounds Crew, Ms. Josephine Bautista, Mr. Richard Edwards, MI RETAP, TSgt Patrick Weatherbee, MSgt Tony Heyart, TSgt Jason Jandernoa, MSgt Ron McKellar, SMSgt Michael Labruzzo,

The Problem Statement

110 AW Routinely Recycling ALL Scrap Metal, without any presorting, through one scrap metal dumpster...



Receiving \$0.10 per lb, when high value metals (Aluminum, Copper, Brass) are worth 10 to 20 times as much

The Opportunity

110 AW Recycling Income, 2008-Present:

\$46K



*How much money can we generate
in future by standardizing our high value
metal pre-screening process?*

6S – “Sort”

AFSO 21 – 6S methodology? – *nothing more than common sense.*

Sort - Sort necessary from unnecessary items and scrap unnecessary.
- Get down to the “Critical Few” pieces of equipment



Dumpster Tipped Out



A mess of mixed metal,
plastic, and trash



Look Closer, Start
Sorting,



High value aluminum, copper, motors, mixed in with
low value scrap steel

6S – “*Straighten*”

Straighten

- “A Place for Everything, and Everything in it’s place”
- Tools, Equipment, Reference Materials located “at point of use.”
- Making it very easy for EVERYONE to see where things go.



Clean, Well sorted, small recycling container at CES

6S – “Shine” & “Safety”

Shine - A clean, well lit, well organized workplace is by definition a safer, and more efficient workplace

Safety - Elimination of any possible hazardous situation
Making safety issues visible

EXAMPLE: TAKE GREAT CARE TO ENSURE YOU ARE NOT CREATING A HAZARD, I. E., ENSURE PRESURRIZED CYLINDERS ARE DRILLED, MTY, and NON-HAZARDOUS !



6S – “Standardize”

Standardize

- The agreed-upon set of work procedures that establish the best and most reliable methods and sequences for each process and each worker.
- Flexible enough to meet customer demand.
- A prescribed sequence of steps.
- Represents the current best practice.



Use smaller bins at point of scrap metal generation to segregate high value metals before they are lost to scrap

6S – “Sustain”

Sustain:

- *Sustain occurs when everyone keeps the rules, ...ALWAYS.*
- *All other 5S levels are present and in place for a sustained period of time*

Results of NOT Sorting Metals for Recycling:

Revenue of a full, un-sorted dumpster at mixed steel price **10,884 pounds at \$0.07 per pound**

\$ 772.76

Results of 6S Pilot Project – Pre-Sorting Metals for Recycling

Aluminum	203 pounds	\$82.30
Stainless	4 pounds	\$2.20
Electric Motors	222 pounds	\$39.96
Copper	643 pounds	\$783.20
Brass	71 pounds	\$99.40
Mixed Steels	9214 pounds	\$682.14
Wood etc	100 pounds	\$ 0
TOTAL	10,884 pounds	\$1590.25

- 1. Copper appears to be the biggest single opportunity***
- 2. 643 lbs of copper yields \$783, ...11,000 lbs of scrap steel yields only \$772 !***

THANKS & ALL CREDIT TO:

Mr. Blair Clarke, 110 CES/CEZM
110 CES Grounds Crew

Ms. Josephine Bautista, 110 AW/FM
Capt Dan Guy, 110 CS/CC

MSgt Tim Reynolds, 110 CF/SCX

Mr. Richard Edwards, MI RETAP

TSgt Patrick Weatherbee, 110 LRS/LGRM

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