UNITED STATES POSTAL SERVICE

MTAC
Mail Prep & Entry Focus Group Webinar

May 7,2015

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Agenda

- Outstanding Issues from February Focus Group
- Service Hub Update
- Bundle Breakage Update
- Label Hygiene LSS Project
- Work Group Update
- SPSS Machine Update
- Engineering Update

Mail Preparations and Entry (Operations) Focus Group Outstanding Items

Outstanding Issues

Session 1: PACKAGE SERVICES (John Medeiros, MTAC Industry Leader)

Action Items

- Review DNDC Full Service exceptions entered at DSCF – physical flow/entry vs. data verification
- Mail directional file potential data discrepancy – 03103 (example); MDF vs Mailer Scorecard (eVS).
- A request for 2016 to establish touch point/cadence for larger Priority mailers during peak period
- Investigate opportunity to extend March 2 compliance deadline for new lithium battery mailing standards.
- Improve process for communicating information in Federal Register notices (decision needed as soon as possible
- Are specifications around new warning labels for lithium batteries sufficient
- Notify industry when Hub pilot sites (4) have updated date in FAST to make appointments - update by Monday (02/23/2015*)*
- NACUMS (National Association of College and University Mail Services): Follow-up on IMpb communication to field and field to customers (BSN, Local postmasters, etc
- API developed for eVS – Is this moving towards USPS requiring eVS?

Outstanding Issues

Session 2: FIRST-CLASS MAIL (Sharon Harrison, MTAC Industry Leader)

Action Items

- Provide date for tray labels to be added to MTEOR (Industry Alert)

- CSAs Presentation
  - Control charts: Identify mean, mark OWC (Operational Window Change)
  - Report out on pilot updates at next MTAC meeting
  - Bin codes Dispatch & Routing (D&R) tags (TMS)

- Tray labels
  - Report out on Pareto for root causes of non-reads once scanners are upgraded
  - Share stills from videos for auto tray and labeler

- Industry Alert to notify Remittance mailers of resources on *RIBBS.*

- Report out on Remittance Mail re-direct pilot and program status (before next MTAC at NPF)

Outstanding Issues

- **Session 3: PERIODICALS** **(John Stark, MTAC Industry Leader)**

Action Items

- EMIR Process Improvements: Further update at next meeting
- New parcel machines – impact on bundles (including industry involvement).
- USPS will share how FSS DPS percentage is calculated What is the percentage and what is the plan to increase the percentage?
- Information on pallet productivity rate in costing models (Standard vs Periodicals)
- Share flat specification changes from 7-8 years ago
- Share data from Steve Dearing on Periodical entry and delivery
- Documentation of DSCF discount for entry at Hubs.
- Confirm if recurring or standing appointments will work for Hubs (FAST
- *Splash* on *RIBBS* when Hub data files are published

Outstanding Issues

Session 4: STANDARD MAIL (Wanda Senne, MTAC Industry Leader)

Action Items

- EMIR Process Improvements: Further update at next meeting.
- Industry to share cycle time data with Linda, Dale and Cathy to address areas of concern with OWC (Operational Window Change).
- Dale Kennedy (Dale.e.kennedy@usps.gov) will communicate further updates around new issue submission process and training (eService/Panorama)
- Flow charts to show current vs. future FSS pricing and options (industry).
- Invite Pricing representatives to hear discussion around pricing.
- Additional discussion on high-density and high-density plus impacts.

Service Hub Update

Accomplishments

- Phase I Complete
  - 46 Active Hubs became effective on April 1st
  - Includes 4 pilot sites activated in January
- Phase II Sites Selected
  - Approximately 166 additional sites will become live on July 1st
- Work Group 159 Officially Sunset
  - Recommendations made
  - Resolution Statement completed and posted in MITS

Recommendations

- USPS to review remaining former SCFs for eligibility to become a Service Hub
- Identify additional Service Hubs for July update cycle
- Add eligibility for DSCF discount and preparation requirements to DMM
- Create standard labeling list for Service Hubs
  - This item transferred to User Group 9 – Presort Reference Data

Service Hub Documentation

- Service Hub Guidelines
  - Posted on RIBBS under Important Updates:

    https://ribbs.usps.gov/index.cfm?
- Phase I Service Hub Facilities List
  - Posted on RIBBS under Important Updates:

    https://ribbs.usps.gov/index.cfm?
  - Posted in FAST under Drop Ship Product File Download

    https://fast.usps.gov/fast/fastApp/resources/dropShipFileDownload.action

Bundle Breakage Update

Bundle Breakage

- #1 cause of machine stoppage on the APPS/APBS is due to single pieces loose in the machine

- Each flat in a bundle that breaks costs 12.6¢ to manually gather, face, containerize, transport and process to restore a carrier route sortation

Initially estimated in excess of $9M monthly

Bundle Breakage

- ***Bundle Breakage/ Nesting Errors Trend***

National Totals	Bundles Scanned on APPS/APBS	Bundles w/ Multiple Piece Scans	% Bundles Broken or Nesting Errors	Standard Mail	Periodicals
Jan 1-16*	21,005,751	4,447,935	21.2%	21.9%	20.1%
May 20-Jun20	37,003,552	3,146,827	8.5%	11.4%	3.7%
July	35,009,112	2,927,357	8.4%	8.2%	3.4%
August	40,313,730	3,470,291	8.6%	10.5%	4.1%
September	41,880,938	3,140,316	7.5%	9.2%	3.7%
October	56,155,874	3,316,881	5.9%	6.9%	3.5%
November**	53,703,623	957,727	1.8%	1.8%	1.8%
December**	33,897,719	756,359	2.2%	2.7%	1.4%
January 2015**	38,712,170	929,191	2.4%	2.8%	1.5%
February 2015**	40,143,395	807,990	2.0%	2.2%	1.6%
March 2015**	43,552,233	1,136,189	2.6%	3.1%	1.5%

*January data prior to SEM installation on APPS and prior to FSS prep requirements
** November to March utilized **3**-or-more scans per bundle to eliminate nesting errors

Bundle Breakage

- ***Bundle Breakage/ Nesting Errors Trend***

- **Actual nesting errors have been reduced**

- **Nesting errors virtually eliminated from report (new parameter for report - 3 or more scans from one bundle per eDoc)**

- **Since November actual breakage has been increasing**

Bundle Breakage

- ***Categories with most significant breakage***

  - **Bundles secured with <u>string</u> experience catastrophic breakage on automation**

  - **Bundles secured with <u>rubber bands</u> experience double-digit breakage**

  - **<u>Co-mail</u> represented just 22% of bundles**
    - **Yet represented 47% of bundles with defects**
    - **For every bundle that actually broke, 3 <u>additional</u> bundles were diverted from automation and reworked**

Bundle Breakage

- ***Cost of bundle breakage***

- **Actual bundle breakage increasing**
  - **Now estimated at $2 million monthly**

  - **Costs for rework not estimated, but represents three times the volume of bundles that actually break**
    - **Requires re-strapping or**
    - **Process on flats automation to restore presort order**

Bundle Breakage

- ***Steps to reduce breakage***
  - **Modified APPS/APBS bundle process**
    - **Bundle removal device modified**
    - **Exposed bolts in universal dumper modified**
  - **Created bundles utilizing industry standard equipment**
  - **Conducted controlled testing on different bundle packaging**

Bundle Breakage

- ***New "Perfect" Bundle***

Bundle Packing Construction

Bundle integrity is crucial to protecting the presort preparation. If bundles break open in transit or processing, pieces may be damaged and will require individual piece sortation, which would reduce processing efficiency and might delay visibility and receipt of the mail. REF: **DMM Revision: Centralization of Bundling Standards**

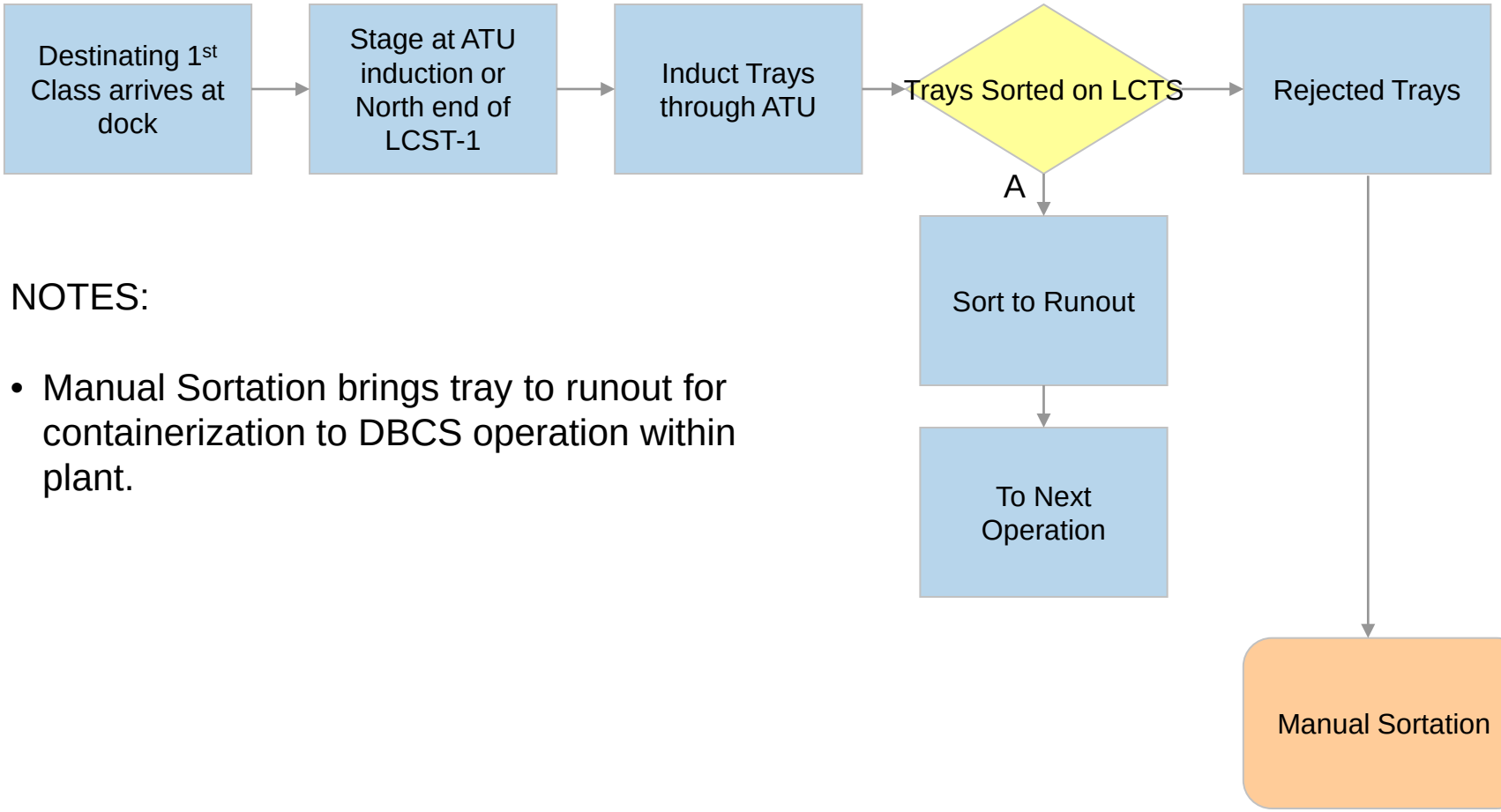
Label Hygiene LSS Project

Label Hygiene LSS

- Preliminary Results
- Collection Problematic for Data Validity
- Essential to Eliminate Noise Factors
- Multiple Site Data Compromised
- Collection Method Revised Multiple Times
- Two Collectors Required
- Current Data Is Single Site Only
- Results are Northern VA Facility

1st Class Current State Process Map

Northern Virginia P&DC - Destinating

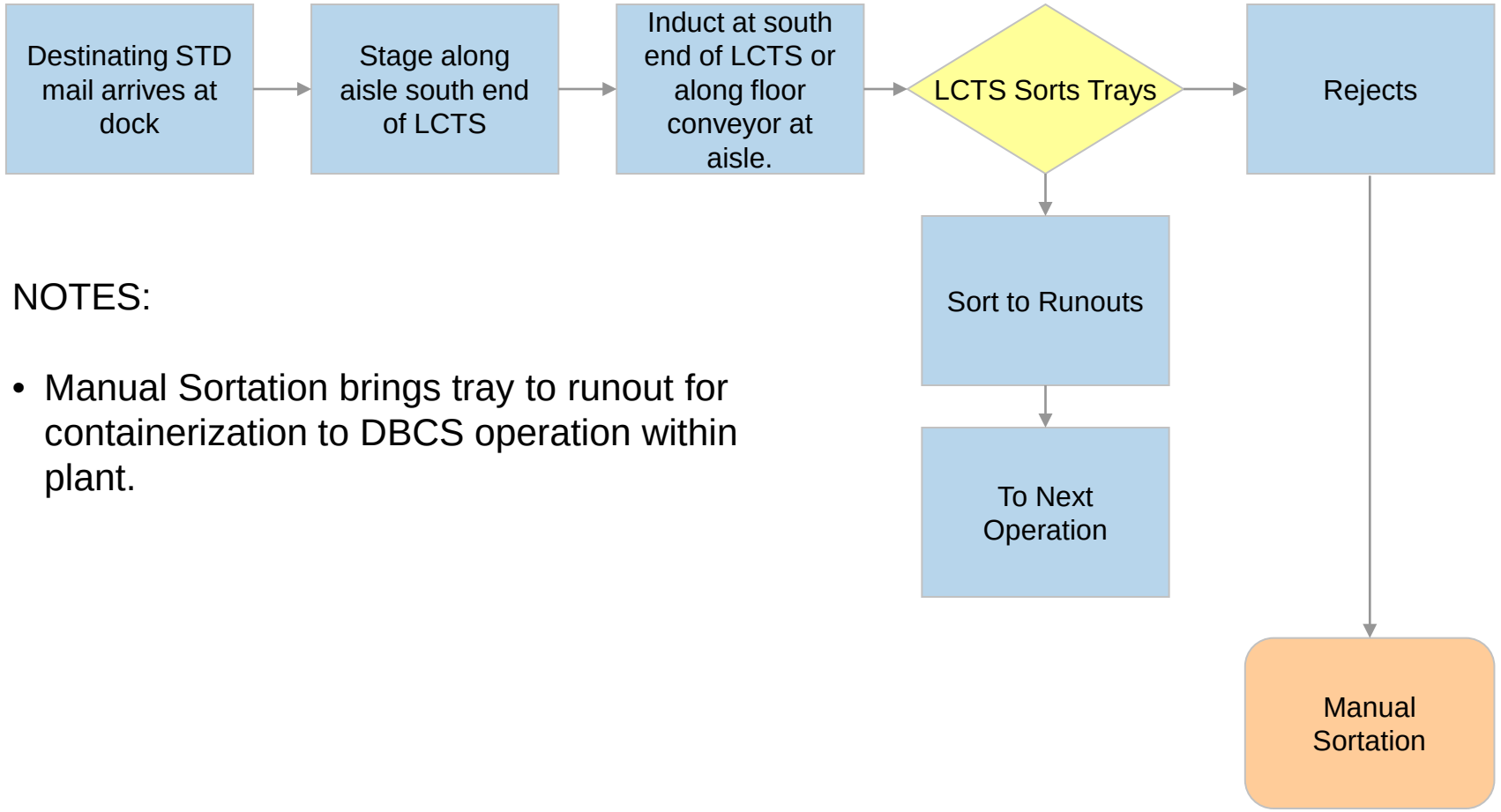


NOTES:

- Manual Sortation brings tray to runout for containerization to DBCS operation within plant.

STD Class Current State Process Map

Northern Virginia P&DC - Destinating



NOTES:

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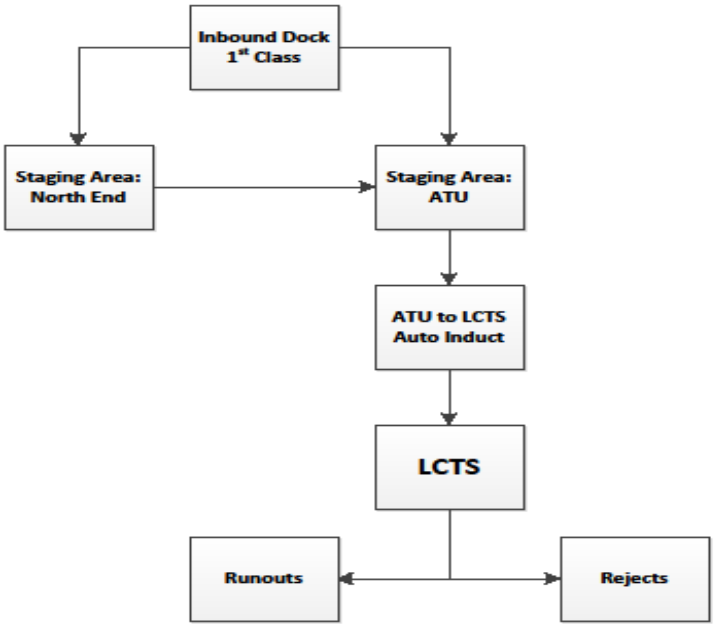
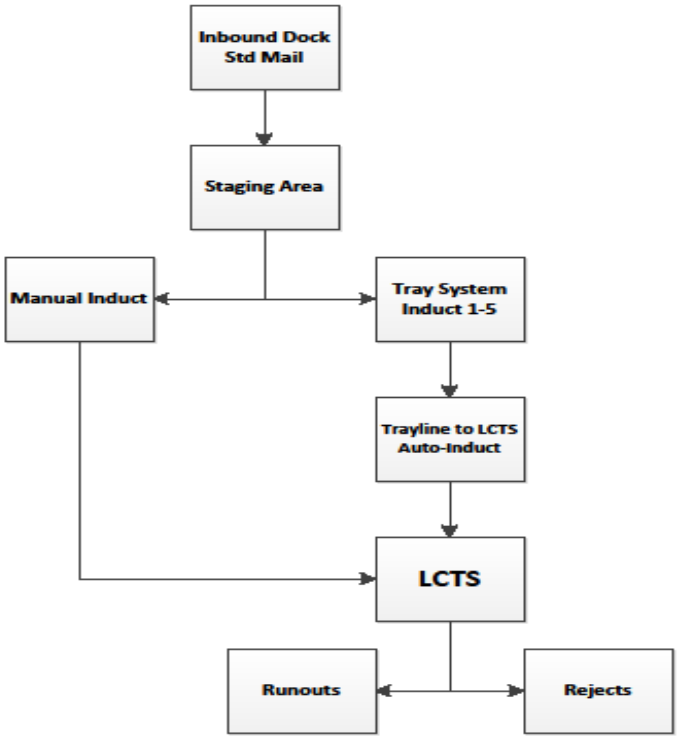
Value Stream Map

1st Class Mail



STD Mail



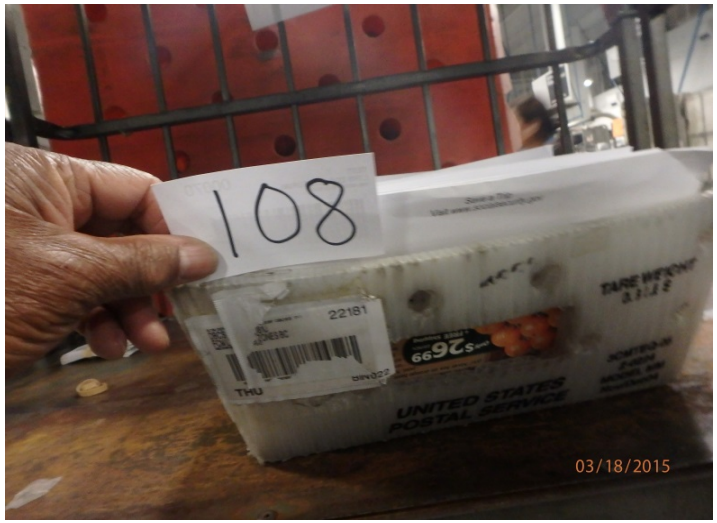
Value Stream Map of process developed.

Collection Method

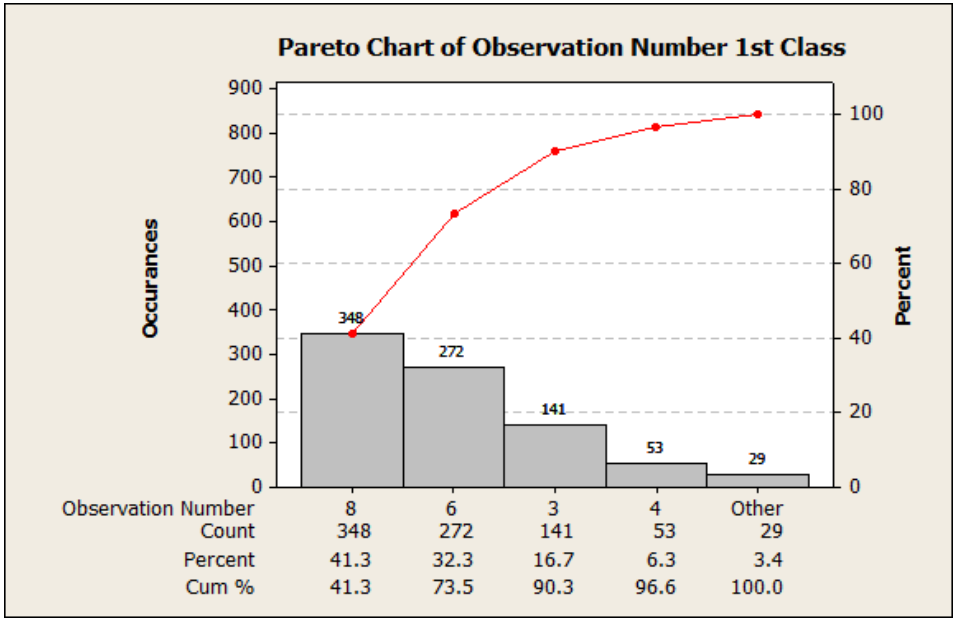
- Rejects from Tray Line/Sorter Logged
- Tray Rejects Set Aside
- Picture Taken of Reject
- Barcode Hand Scanned and Documented
- Bad Labels Saved for Analysis & Replaced

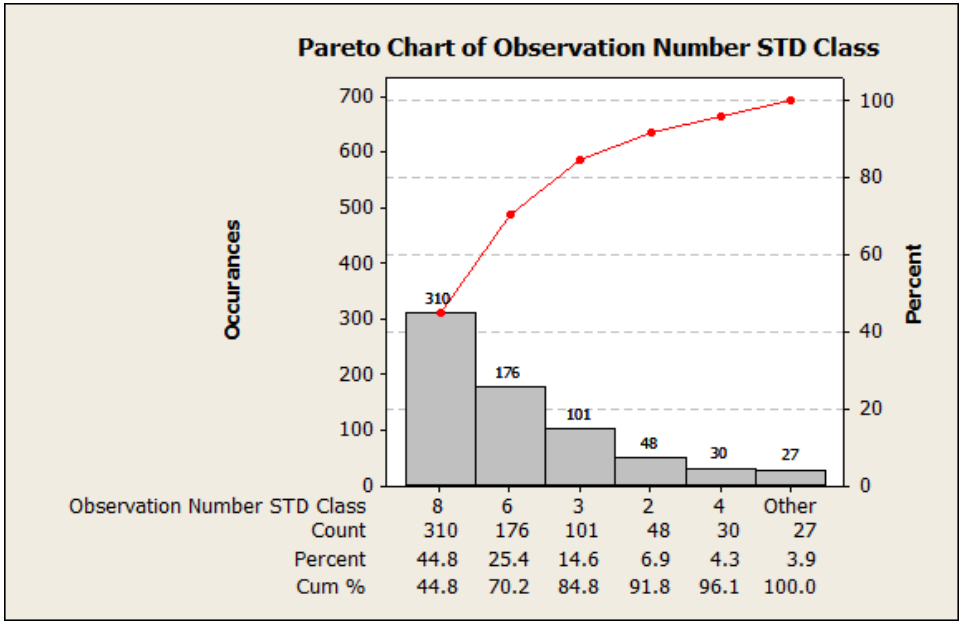
Data Collection Pictures, 1st Class

Data Collection Pictures, STD Mail



Baseline Data: Pareto 1st Class & STD Class

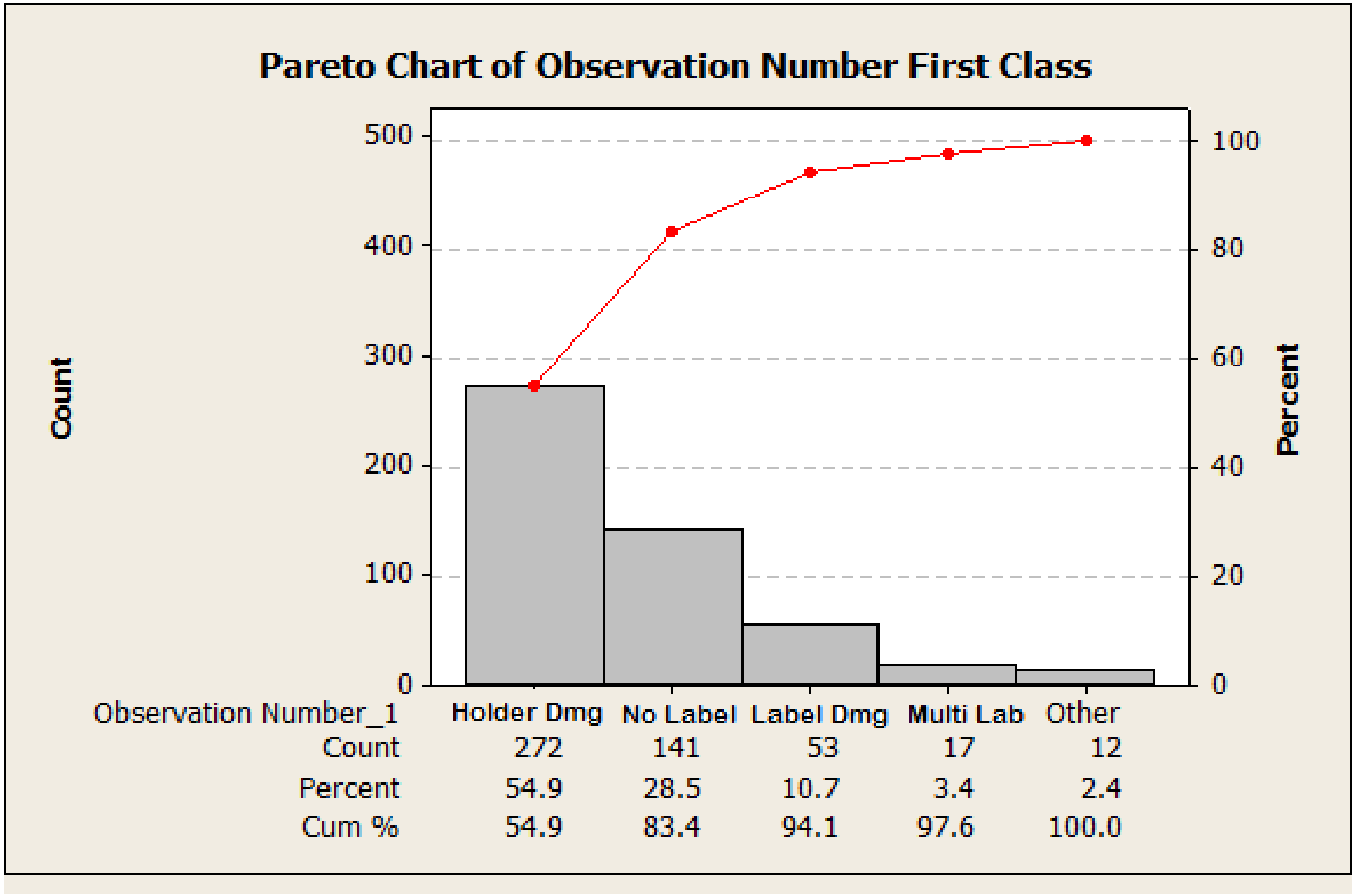




The numbers represent the type of reject

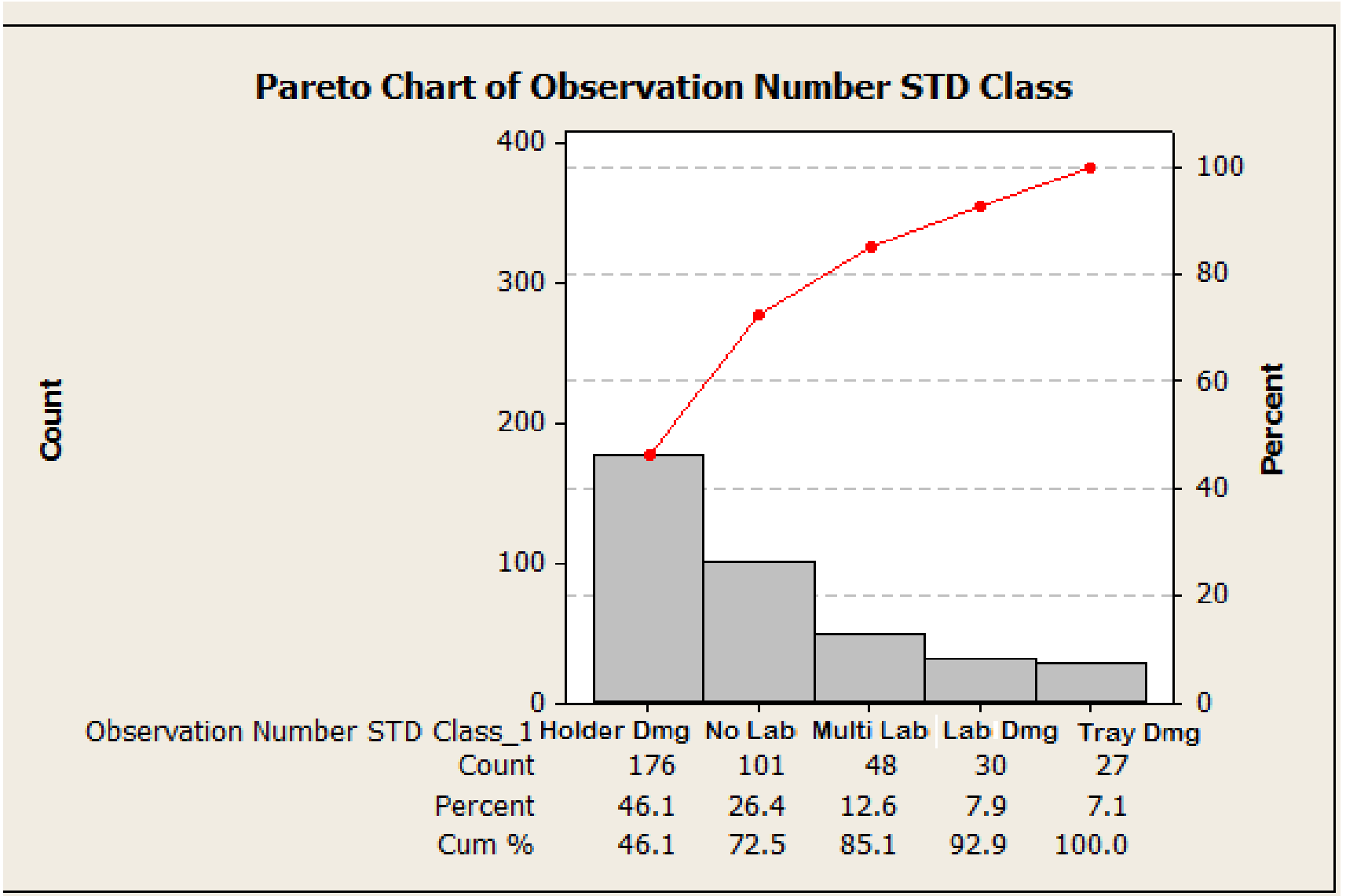
1 = Half Tray Turned 2 = Multi-Label 3 = No Label 4 = Label Damage 5 = Tray Damage 6 = Pocket Damage 7 = Sleeve Cover 8 = Unknown

First Class Pareto



Observation Number_1	Holder Dmg	No Label	Label Dmg	Multi Lab	Other
Count	272	141	53	17	12
Percent	54.9	28.5	10.7	3.4	2.4
Cum %	54.9	83.4	94.1	97.6	100.0

Standard Pareto



Observation Number STD Class_1	Holder Dmg	No Lab	Multi Lab	Lab Dmg	Tray Dmg
Count	176	101	48	30	27
Percent	46.1	26.4	12.6	7.9	7.1
Cum %	46.1	72.5	85.1	92.9	100.0

Next Steps

- Continue Data Analysis
- Collect from Additional Facilities
  - Harrisburg
  - Seattle and Portland
  - Chicago
  - TBD
- Follow ATU Camera Upgrades
- Expand Analysis May - July

Work Group Updates

MTAC Work Group #168

WG # 168: *FSS Multi-scheme Pallets*

Initial Meeting : 2/20/15 - Webinar

Target Completion Date: 8/31/2015

- **Meets bi-weekly**
- **Have requested the Field to provide list of three schemes that may work in combination**
- **Scheduled trip to Philadelphia P &DC on June 4th**
  - **Evaluate modified SAMP operation to support multi-scheme pallets**

MTAC Work Group # 169

WG # 169: *Refine Parcel Machinability Standards*

Kickoff Meeting: 2/19/2015

Target Completion Date: 1/31/2016

- **Examined current DMM standards and identified opportunities for clarification**
- **Reviewed prior engineering studies on how parcel dimension specifications were derived**
- **Discussing issues and opportunities for both the industry and USPS**
  - **Parcel structure simplification**
  - **Analysis of packaging materials**

Remittance Mail Update

RMAC Board Meeting – TBD

RMAC Member Webinar – TBD

- **COMMUNICATIONS**
  - Updated national Remittance operations contact list
  - Remittance Operations contact list and remittance sort program site list posted on RIBBS at: https://ribbs.usps.gov/importantupdates/remittancemail.htm

- **NEW PRODUCTS/Ventures**
  - Earned Value Promotion
    - Register 3/15-4/30/2015 (Completed)
    - Promotion Period TBD
  - Remittance Mail Redirect
    - Pilot concluded 02/2015
    - Redirected 85% of ltr mail (15%=combination of flats, no reads, etc)
    - Currently, customer couriers avg of 2,500 pcs/day from ATL to Dallas

- **OPERATIONAL PERFORMANCE**
  - Operational Window Change for Remittance processing implemented 01/05/2015
  - Operational Kaizens conducted; streamlined remittance mail flows
  - Closely monitoring remittance operating plans

Small Package Sorting System

Background

- Package volumes expected to continue growing at a rapid pace
  - Significant growth in volume in the network will put tremendous strain on existing infrastructure
- Need to prepare now for current and future network needs
  - Leverage availability of additional commercial off-the-shelf (COTS) mail processing equipment (MPE) currently in deployment

Progress to Date

- Purchased five (5) SPSS sorters for packages weighing 20 pounds or less to evaluate sorter usage in different processing environments
- Primarily a pilot test and evaluation effort to assess potential future use in supporting growing package volume needs
- Enhanced requirements are being developed and they will be included in the purchase of 26 additional SPSS machines

5 Pilot Test Sites

Sorter #	Facility	Config	# Bins	# Inducts	# Platforms	Site Installation Starts	Operation Usage/ Handover
1	Phoenix West Valley P&DC	Closed Loop	196	5	1	09/12/2014	11/18/2014
2	Los Angeles ISC	Closed Loop	144	4	1	10/19/2014	02/06/2015
3	North Houston P&DC	Closed Loop	188	5	1	11/18/2014	02/20/2015
4	Queens P&DC	Closed Loop	196	5	1	01/12/2015	03/20/2015
5	Royal Palms P&DC	Closed Loop	188	5	1	02/09/2015	04/03/2015

Additional Machines

- Acquire 26 additional SPSS machines for deployment beginning summer 2015
- Support key locations where significant package volume is being sorted manually due to capacity shortfalls
- Added capacity will generate opportunity to move package volumes from manual operations onto automation

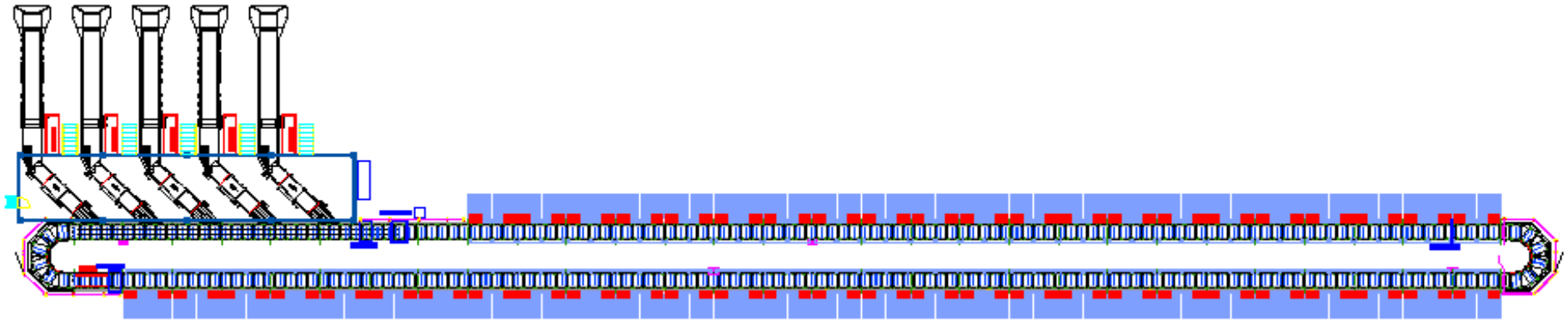
Enhancements

- Increased carrier cell size to handle larger packages
  - 5 SPSS handles 15" x 11" x 10" and 20 lbs.
  - 26 SPSS handles 22" x 16" x 10" and 20 lbs.
- OCR / VCS Support - Upgrade from initial barcode only reading
  - OCR - April 2015
  - VCS – May 2015

SPSS Configuration

Standard Configuration:

- 5 inductions/1 platform
- 196 discharge chutes to wiretainers, pallet boxes or spinner sack racks
- Operator singulates, faces and slides package to induction belt
- System collects weight & dimensions of every package
- Postal Furnished Top-read camera determines barcode
  - Top-Read OCR upgrade April 2015, and VCS May 2015
- Fixed Mechanization Process Control System (FMPCS)



SPSS sorter spine

SPSS sweep side view

SPSS dumpers and incline belts

Next Steps

- Official notification to all stakeholders
- Site visit with Unions
- Finalize deployment schedule

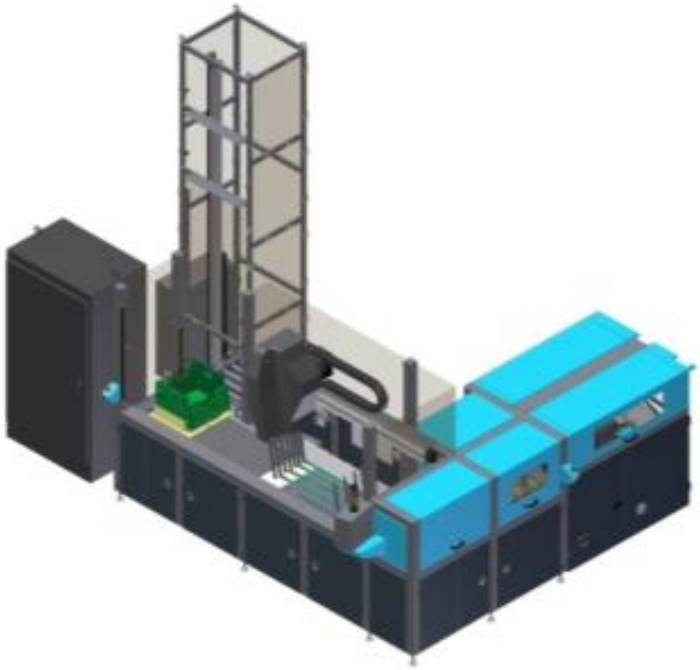
Engineering Technology Update

- ***Engineering Topics***
  - High Speed Flats Feeder (HSFF)
  - SAMP Sorter R&D

High Speed Flats Feeder

HSFF FY15 Plan Forward

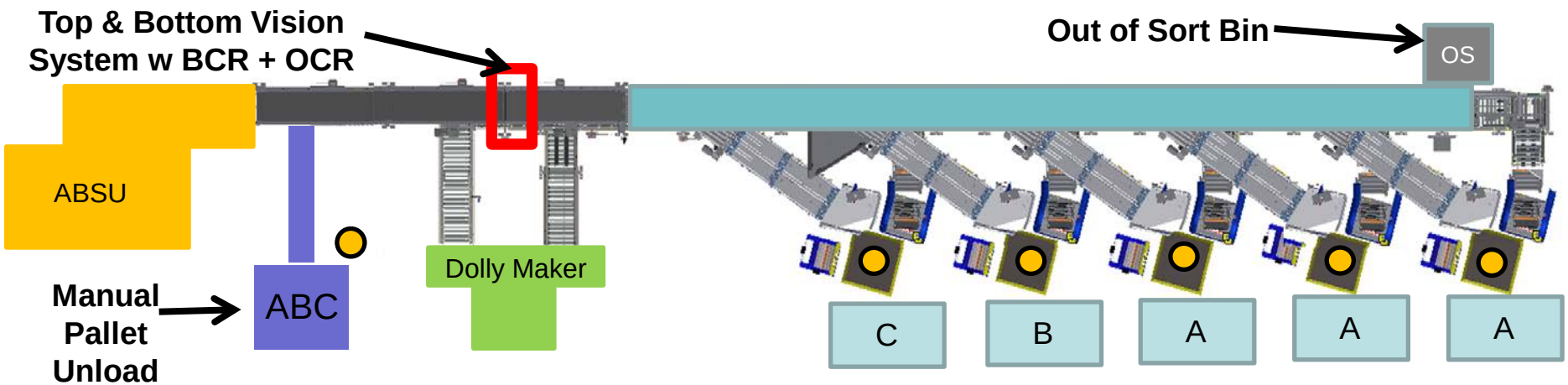
- Continue processing “live” mail
  - Dulles and Philadelphia P&DC”s
  - Reduced on-site Engineering Support to one Tour
  - Provided HSFF maintenance training
- Production Support
  - HSFF TDP
  - HSFF Installation and Assembly Manual’s
    - Support “build to print” contract
  - Royal Palm P&DC effort
    - 3 FSS systems upgraded – Summer 2015
    - Contract Award complete
    - In process of manufacturing HSFF’s
    - Data collection – Business Case
- Production Forward Plan (Decision Timeline)
  - TBD



SAMP Sorter

R&D Effort Status

- Phase 1: "Sort to Prep" SAMP Sorter *(complete)*
  - "Out of Sort" bundles only
  - Add top & bottom vision system w BCR & OCR and add Out of Sort "bin"
  - Provided a demo of prototype system in Linthicum; system is currently in Philadelphia PA P&DC
- Phase 2: "Sort to Prep" SAMP Sorter *(90% complete)*
  - Add "bundle sort" capability & sort bundles to prep stations
  - Manual Pallet Unload solution (avoid bundle overlap and on edge)
    - Not desirable – need Pallet Unloader solution at ABSU
  - Allow for multi-scheme pallets (3 schemes on same pallet)
  - Demo scheduled for early June with MTAC



R&D Effort Schedule

- Phase 2 - 90% complete
  - Demo scheduled for early June with MTAC at Philadelphia PA P&DC

- Challenges
  - Bundle overlap and bundle on edge from dumping (decreases read rate)
    - Current solution: Manual Pallet Unload
    - Not desirable – need Pallet Unloader solution at ABSU or add culler operator (requires major mod to SAMP to conform to safety and ergonomics requirements)
  - Bundle packaging greatly affects read rate

Questions