

**MTAC AFSM AI Workgroup #96**  
**PostCom Meeting Notes**  
**9/29/05 - 9/30/05 Meeting**

MTAC workgroup 96, Developing an Interface to the AFSM 100 Automatic Induction (AI) Process, held its first meeting at the Southern Maryland USPS Processing & Distribution Center (P&DC) on September 29, 2005, with a subsequent meeting held at USPS headquarters on September 30, 2005.

**Update on AFSM AI**

Prior to observing the equipment on the workroom floor, the USPS and Northrop Grumman provided an update and briefing on the AFSM 100 AI equipment.

Wes Goode, USPS Engineering, noted that the main features of the AFSM AI system include standardization, ergonomics, it is machine-paced rather than operator-paced, and it has an automatic waste removal system (trash collection, compaction and preparation for recycling). The AFSM AI system features a new container manufactured by Northrop Grumman as part of the AFSM AI modification contract, called the Automation Compatible Tray (ACT).

The USPS noted that the AI system increases throughput on the AFSM 100 by ten percent. The USPS currently has two AFSM 100s with the AI modification in the Southern Maryland P&DC (with a 3<sup>rd</sup> AI system to be added in the next several months), as well as a First Article test machine in Pittsburgh PA, with another to be added there in the next couple of months. The USPS plans to begin AFSM AI deployment by the start of November 2005, with targeted completion by August 2006; deploying around 206 AI systems.

The AI system includes a variety of modules: the ACT, bundle induction, bundle conveyors, prep stations, ACT conveyors, feed stations, and the Packaging Recovery System (PRS).

The USPS feels there is a real opportunity to reduce total flats processing costs through the labor reduction of modifications such as the AI system. The USPS already is working on potential solutions to reduce the manual labor of prepping bundles for the ACT trays.

The USPS noted that the AI modification reduces the staffing required on the AFSM 100 from 5 people to 3 people. Addition of the Automatic Tray Handling System (ATHS) takes that requirement down to 2 people, and TMS systems require only 1 person. This does not include the mail preparation part of the process. The USPS said the labor savings sufficiently cover its technology investment.

The ACT features a removable door, a comb feature for raking out mail, and the USPS stressed it is for internal USPS use only. The ACT is stackable, but not nestable. Northrop noted that each AFSM

100 with AI machine would require 97-100 ACTs, which has been built into the acquisition costs of the system for the USPS. Essentially, the ACT is part of the machine.

The AFSM 100 AI can induct mail in flat tubs for some operations. The USPS noted that it will modify AFSM 100 machines first with the AHS, then with AI.

### **Under FSS**

The workgroup agreed that while in the short-term, discussions and work should take into account the existing mail processing environment, the group also should look toward potential solutions in 3-5 years when FSS is deployed. The USPS said that FSS machines will use the same ACT containers, AI system, etc. except much bigger and faster.

Mailers asked what will happen to existing AFSM 100 equipment when FSS machines are deployed and the USPS said that the AFSM 100's role may be modified (e.g., primary sortation only in some USPS facilities under network re-design where the roles of the facilities themselves may change). The USPS said the AFSM 100 asset remains viable in the FSS world, and said it will work toward leveraging both equipment types for commonality and compatibility.

Wes Goode said that the USPS current vision is to deploy FSS equipment differently than it has deployed processing equipment in the past. Rather than having single machines deployed to a multitude of plants to establish national coverage, FSS deployment likely will propagate a geographic area by concentrating the deployment with multiple machines in single facilities, dependent on flats volumes.

One comment was that for years the industry and USPS have become focused on a presort-centric mail preparation environment, and FSS likely will transition that focus to a presentation and product environment.

### **Workgroup Function**

The workgroup discussed its mission and plans to achieve that mission. Workgroup industry co-chair Mike Winn, R. R. Donnelley, encouraged the group to think of its activities in terms of processes, inputs and outputs, and to look openly at all potential solutions. The workgroup agreed that while it first is looking to streamlining the AFSM AI process within the existing mail preparation environment, it also should keep an eye toward the future flats sequencing environment (FSS).

The workgroup agreed that its work may involve looking at mail containerization, transportation issues and mail preparation issues both for the USPS and industry. It was agreed that largely the workgroup can make recommendations concerning APPS as it relates to its function, but those recommendations would be considered by another group or by the USPS in another venue.

### **Equipment Observations**

The workgroup toured the flats processing operation at the Southern Maryland P&DC, observing the AFSM 100 with AI modification processing bundles of flats. The workgroup observations included the following:

- the “tilter/dumper” used by the AI system (“ABSU dumping device”) appears to be a much gentler device for handling flats bundles than the device used by APPS
- The bundle conveyor is much shorter and a more gentle angle than that used in APPS
- It appears there are three primary inputs to the AFSM AI system – direct printer prepared containers (although the USPS said under the existing sortation environment these containers primarily are processed by APPS first, with the few direct containers coming to the AFSM AI from First Class Mailers only), APPS output, and output from other USPS processes. Industry suggested that perhaps a subgroup should spend a day at an AFSM AI site collecting data on input sources, etc.
- Does the variability of flats mail characteristics cause jams to increase? Per Northrop, there is no appreciable difference and the cost of culling flats to separate them by machine would eat up any potential savings.

### **Initial Industry Feedback**

During the workgroup meetings, industry raised the following issues:

- Any printing environment which largely requires two separate mail preparation techniques would be cost prohibitive.
- Printers have requirements and needs that cross all output areas, including mail, newsstand, newspaper, and other distribution channels.
- Printer outputs vary depending on the customer instructions, and can include preparation of product in cartons, gaylords, pallets with shrinkwrap, bundling, etc. Every job is driven by customer needs and increased efficiency for the end customer.
- Transportation aspects of any change in containerization must be considered, both for industry and USPS. “Air” containers are cost prohibitive. Printers prefer one containerization method for all mail.

Some additional thoughts raised during the workgroup meeting included:

- Should the USPS and industry be moving in a direction of not producing bundles? Or is a bundle a good economical “container” in certain situations? The USPS agreed that printers should not be making significant long-term investments in bundle preparation equipment...
- The USPS looks at productivity from APPS vs the AFSM 100 with AI in terms of bundle preparation/sortation.
- The USPS asked whether densely packed mail generally weighs out or cubes out in terms of transportation. The printers said it generally weighs out and reiterated that the containers and product must be stackable otherwise floor space runs out first.
- The USPS and Northrop are working on a device to take mail from flat tubs to ACTs in the long-term
- The USPS noted that in general piece-handling costs are reducing and bundle handling costs are increasing.
- The workgroup should keep an eye toward a communication plan when work has been completed in terms of the critical messages that should be communicated to the USPS and industry through MTAC or member associations.
- The USPS noted that it needs 20,000 Standard Mail flats quickly for its Troy Hill in-plant FSS machine test.

### **Follow-Up Activities**

The workgroup identified the following actions:

#### ***All:***

- Review the work/report of the previous workgroup prior to the next meeting

#### ***USPS:***

- The USPS (Mauro Liciardello) will prepare a work flow chart that shows the processes that result in input for the AFSM AI system (direct printer prepared containers, APPS output, and output from other USPS processes).

- The USPS will attempt to quantify the percentage of mail that comes to the AFSM AI system from the various input sources
- The USPS and Harte-Hanks will be performing a test with live mail presented in ACT trays and assess how that mail holds up during transportation and feeding to the AFSM AI. The test likely will be performed in December.

***Suppliers:***

- What technology or other developments have occurred since the last workgroup looked at containerization changes, or are likely to occur in the mid-term, that could impact containerization? Northrop and Siemens said they will work out an update to present at a future meeting.
- Bill Worth will begin to form a list of desirable container characteristics/constraints, with input from others in the workgroup.
- Rob Laybourne will work on identifying what data should be collected as part of the Harte-Hanks test

***Industry/USPS:***

- Dave Williams, Mike Winn, and Kathy Siviter will review other existing MTAC workgroups and joint efforts to identify inner-connectivity opportunities

**Next Meeting**

Mike Winn invited the workgroup to meet next on October 18, 2005, at the R. R. Donnelley site in Lancaster, PA. The workgroup will tour and observe various print operations, both mail and non-mail production lines and containerization techniques.

Mike Winn will send out directions as well as hotel/airport information for those that plan to stay overnight the night before the meeting. The meeting likely will begin at 9:00 am and conclude around 4:00 pm.

The next scheduled meeting of the workgroup after that will be on Nov. 2 from 8:00-11:00 a.m. in USPS Headquarters, Room 1P439.