

MAIL HANDLERS FACING MODERN TECHNOLOGY

Teresa Harmon, Manager, CAD



In this issue, I want to give a brief overview on several technological issues effecting the mail handler craft. These include:

SURFACE VISIBILITY (SV)—SCANNING

In the early 2000s, the Postal Service began an initiative known as the Surface Visibility Program. The purpose of this program was to collect data at the mail handling unit level in order to track mail volume through surface transportation in an effort to collect the end-to-end data required to support planning and optimization of the postal transportation network. The Surface Visibility Program has evolved and changed since that time, and it continues to evolve as more and more technology becomes available.

To support the original initiative, the Postal Service created a new, enhanced distribution label so that each surface mail handling unit could be uniquely identified. The goal was to scan each individual sack, tray, or tub as it was placed into a container (wiretrailer, GPMC, etc.), and the container could then be scanned as it was placed onto transportation. All along this path, the scanning device would notify employees if the mail piece was being placed into the incorrect container or if the container was loaded onto an incorrect truck. In addition, the system provided near real-time data to alert when trucks were about to leave, which containers were already loaded, and which containers were ready for dispatch but had yet to be loaded.

Initially, the Postal Service installed the scanning equipment, which consisted of one to six hubs in each mail processing site to support the wireless scanners, as well as fixed and handheld scanners. The agency anticipated that the scanners would be used by whomever was working with the container.

At the beginning of this initiative, the Postal Service deployed hand held scanners which were somewhat burdensome to use, but are still in use today in most operations. They evolved to ring scanners that allow mail handlers to process a package using both hands. They have since deployed passive scanners which scan the package as it goes by on a conveyor or other mail movement device, without being handled by a mail handler or any other career postal employee. Indeed, the

Postal Service is beginning to use mobile cellular scanners. It seems that virtually every employee within a mail processing facility is scanning in one form or another.

It is important that all mail handlers working in our mail processing facilities follow management's scanning directives. The data collected by these scans has a great impact upon staffing levels in your facility. The Postal Service feeds the volume data created by these package and container scans into its F-1 Scheduler System, along with other data, to determine how many employees it is required to process the mail in a given facility. The more mail we scan, the greater the volume will be and, in conjunction, the better our staffing will be.

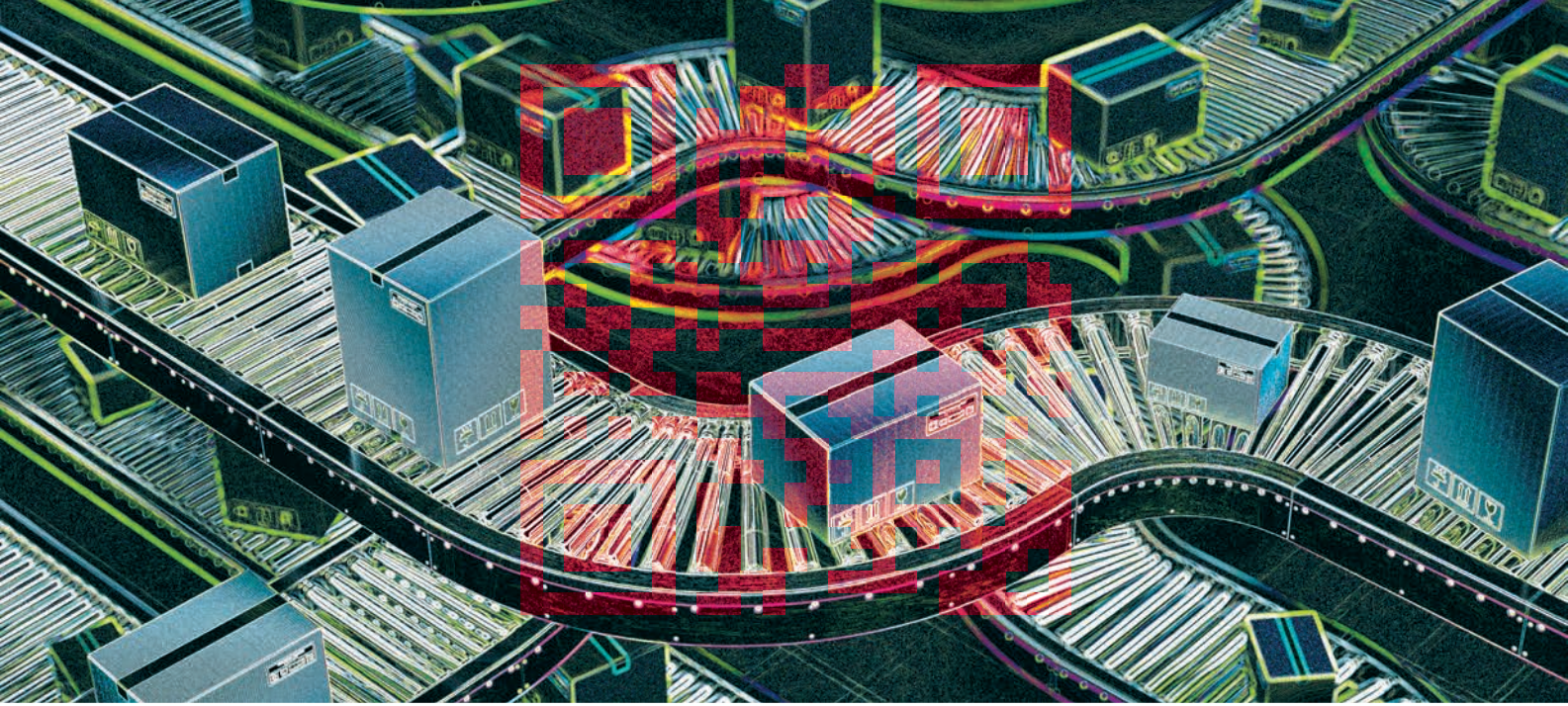
MOBILE SCAN-WHERE-YOU-BAND (SWYB)—WEARABLE PRINTERS

Wearable printers are a new technology that streamlines the processing of packages in sacks that need a Dispatch & Routing (D&R) Tag. (This is the mail that is transported by airplane.) These Wearable Printers will eventually be used on all of the APBS, APPS, EPPS, HTPS, and SPSS machines. They will allow the D&R Tags to be printed as soon as an employee sweeps the bin on the sorters; this will minimize the need to move the mail to another separate scan-where-you-band operation.

These Wearable Printers were originally tested in Queens, NY on the HTPS, which has 400 total bins. They were used at 75 of those bins which contained the mail that needed airline assignment.

In 2018, the Postal Service rolled out a pilot program for the Wearable Printers. During the pilot phase, the wearable printers were only to be used on the APPS. The facilities included in the pilot were Chicago Metro STC, Northwest Rochester P&DC, Greater Newark P&DC, Philadelphia NDC, Peachtree P&DC, Royal Palm P&DC, Los Angeles P&DC, Portland P&DC and West Valley P&DC.

The Postal Service plans to purchase and deploy up to 8,500 mobile printers during the current Fiscal Year 2019 in over 170 mail processing sites. The agency plans to use them on 332 package sorters, including 214 APBSs, 74 APPs, 40 SPSSs, 2 HTPSs, and 2 EPPSs.



SENSOR TECHNOLOGY INITIATIVE

The Sensor Technology initiative consists of utilizing time badges and wireless sensor readers to collect data in an autonomous and passive manner. The Postal Service plans to use this technology to track work hours in specific operations within a facility without requiring manual operational moves through the Electronic Badge Reader (EBR). Normally when an employee reports to a work operation or moves to another work operation they would use their badge to make a move on the EBR. Experience suggests that very few mail handlers ever actually followed this practice. With this new technology, the Postal Service will have the ability to track the movement of employees using autonomous or passive scanning of ID badges without the employee ever making a move on the EBR.

In addition, this technology will provide the Postal Service with the ability to identify and/or locate a mail piece or transport equipment within a facility. It will also be able to generate maintenance or safety alerts when needed.

AUTONOMOUS GUIDED VEHICLES (AGVS)

Automated Guided Vehicles are self-driven Power Industrial Vehicles (PIVs, such as tuggers, forklifts, and pallet lifts) that are dispatched and operated by a central management system.

The current AGVs use three different technologies: Vision Guidance (cameras on ceiling, poles, and columns); Laser Technology (sensors on poles and columns); and Magnetic Tape (guide tape on the workroom floors to mark routes). The obvious intent of these machines is to eliminate labor costs associated with PIV drivers. If these machines prove reliable, we could see a reduction in the number of Level 5 equipment

operators working in postal facilities. The Postal Service claims that the elimination of these jobs, or the reduction of Level 5 positions to Level 4 would result in substantial savings per work hour.

The Postal Service states that the agency spends over \$900 million annually on PIV operators who are moving containers. The Postal Service also contends that only a small portion of the PIV operator's time actually involves driving a PIV and that these mail handlers perform other non-driving duties such as loading/unloading/waiting on mail, waiting on dock for trucks, etc., which comprise most of this overall cost.

Another \$3 billion is spent annually in processing plants on allied labor duties, including platform activities, opening unit work, Mail Prep, and moving containers.

Currently, AVGs are being used in a number of Processing and Distribution facilities across the country, and the Postal Service plans to deploy AGVs to a total of twenty-five (25) mail processing sites by the end of 2019.

The cost of the AGVs ranges from \$100,000 to \$200,000 each. Their life expectancy varies, but it is the same or similar to the traditional PIVs. The Postal Service claims they will not be replacing all PIVs, but the goal is to replace a good percentage of them with the AGVs.

As you can see, neither the Postal Service nor mail handlers are immune to the effects of technology. In an effort to keep up with or ahead of competitors, the Postal Service is implementing numerous technological changes aimed at processing the mail as effective and efficiently as possible. The NPMHU is closely monitoring this situation, and will take all actions possible to minimize any adverse impact on mail handlers around the country.