

"Examining Innovative Postal Products for the 21st Century."

**Oversight and Government Reform Committee's
Subcommittee on Federal Workforce, U.S. Postal Service and
the Census**

9:00 a.m.

Thursday, May 22, 2014

2154 Rayburn House Office Building

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Mpack Systems

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Testimony

Introduction

Thank you for the opportunity to testify today. As a person with nearly 25 years of experience in retail supply chain and logistics, I welcome this opportunity to testify to the subcommittee on Postal Reform. It’s a transitional time for the Post Office, a time of opportunity where their unique position serving every address America with existing infrastructure should be a key competitive advantage, a huge asset in last mile delivery that is unique, distinctive and extremely expensive to duplicate.

I’ve spent my career helping retailers improve their supply chain operations, and over the past two years, worked with consulting firm Boston Retail Partners. BRP has been at the forefront of enabling traditional brick and mortar retailers to remake themselves to satisfy their customers’ desire to have product shipped directly to their doorstep. For many of these retailers, the USPS isn’t on the radar as an alternative to UPS or FedEx, and there is no reason that it shouldn’t be.

Body

I’ve been invited today to testify about our experience in trying to gain acceptance for the m-pack® flat mail piece. A mail piece designed to be profitable handled by the USPS and reduce the cost of mailing prescription drugs.

The idea behind m-pack® started with handling, square is easier to handle and more space efficient than round. The USPS gives machinable flats a lower rate than a parcel of the same weight. I am not completely up to date on rates, classifications and categories and the USPS online documentation isn’t written for the lay business owner, **here’s a sample spread on over the counter rates:**

		Parcel		Flat	
		Weight (oz)	Cost	Weight (oz)	Cost
1	8/08/11	5.30	\$2.22	7.50	\$1.56
2	5/16/14	3.00	\$2.32	3.00	\$1.20
3	5/16/14	3.00	\$2.32	3.00	\$0.90

1. Original Over the Counter Rate Comparison for m-pack® mailer.
2. Using over the counter-Endicia Parcel Postage versus Commercial Flat rate from USPS website)
3. The cost for 3oz First Class mail-Endicia versus a parcel of the same weight for reference.

Flats have clear price advantage to all users of the Post Office, and this page from the 2013, 5 year plan (See Exhibit 3) indicates that first class mail is 3x more profitable compared to parcels. I’m not privy to how the USPS accounts for costs, but the postal rate chart on the USPS website lists “First Class Mail-Commercial Flats”. I’m not here today to discuss specific rates, but our experience to bring a better mail piece to the Post Office that also benefits the tax payers of this country through lower prescription costs.

Our team looked at the machinable flats specifications and designed a mail piece specifically to meet all of the requirements in Section 301 of the Domestic Mail Manual, then went Siemens to prove that our package could indeed run on their flats automation. **Here's a picture** of our mailer running on their flats automation taken from a video of the testing. On June 17, 2011, we received approval of our package from USPS. Please see Exhibit 1.

While this mail piece met the physical and mechanical properties required, it was hard to automate, expensive, and too heavy, more ounces=more shipping cost. We spent the next 18 months refining our package, taking two ounces off the package and creating a solution that could package m-pack®s for mail at up to 50 a second.

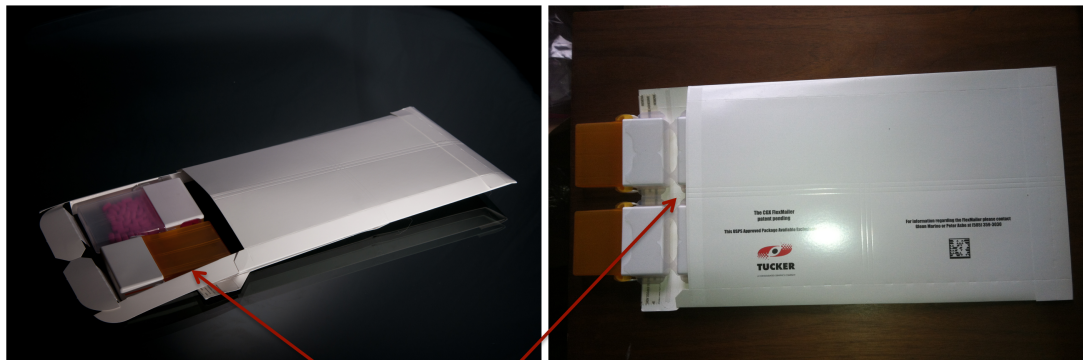
On January 15th, 2013, we submitted three different package configurations for approval as a machinable flat:

- A process called cold seal where the envelope is created around the package
- A Tyvek Envelope with the new inner design
- An update to the originally submitted cardboard envelope with the new inner design.

The response from the USPS mailpiece analyst recapped all of the ways the pieces met the mechanical standards of a machinable flat, but all three were denied stating that **"...contents within the outer envelope are boxes, these pieces do not meet the DMM standard"** and do not qualify as a flat. **Here's a picture** showing the differences between the approved and not approved mailpiece.

The m-pack® mailer below uses the same outer envelop and has the same contents, the m-pack® flat pharmacy vial.

Approved June 17th, 2011 by Don Stuhler, Western New York Mailpiece Design Analyst. Denied February 27th, 2013 Reason: Boxes in an envelope are not a Flat.



Flat tray replaced by plastic web.

In March of 2013, Richard Lee, an m-pack® partner visited the Annual Postal Forum and demonstrated the mailer to Richard Postar from USPS, who was interested in moving the package forward, but never responded to Richard's follow up.

In May 2013, I noticed a blurb on the appointment of Gary Reblin as the VP of New Products and Innovation--he was the sponsor of the Flat Rate box, and I sent him a letter expecting a sympathetic ear. We had a new innovative product that benefits the USPS and the many government agencies sending prescriptions medications thru the mail. We were directed to Lizbeth Dobbs at Mailing Standards, which I did, requesting next steps and offering to engage USPS flats automation vendors at our expense to demonstrate and prove that m-pack® could be processed efficiently, reliably, safely and profitably.

My submission was met with an email thanking me "**for my persistence**", and to contact them again "**if we modify the contents**". My final reply asking for an answer why the same envelop with the same contents was approved previously remains unanswered and m-pack® decided to focus our efforts on other parts of our business. Since then we've contacted UPS and they are excited about the opportunity to handle our mailer.

Summation.

As logistics professionals and business people, we are always looking for opportunities to lower costs and improve margins, both for ourselves and our customers and its time that the Post Office functions the same way. We tried various channels to open a dialog on our mailer, presented the benefits of the package, and volunteered to test and modify the package if necessary to meet the needs of the Post Office. This package would benefit one of it's largest customers, the US Government and the tax payers of this country.

The Post Office touches more than 8 million jobs in the US with an enviable last mile delivery network and can remain relevant provided a change in culture and approach that welcomes change and innovation instead of hampering it. There is a glimmer of hope. Like many professionals today, I work out of a home office and there are Postal Products that I love that make my life easier. But the Post Office must do more, to foster new and innovative products, work with industry to create wins for the Post Office, the consumer, the businesses the rely on the platform.

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Exhibit 6 - More Patients Balk at Cost of Prescriptions - WSJ
Exhibit 7 - Consumer ReportsDrugComplianceFINAL
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Exhibit 9 - adherenceNEJM08042005
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Exhibit 12- Total Number of Retail Prescription Drugs Filled at Pharmacies _ The Henry J

The story of m-pack® .

The genesis of the vial started twenty years ago in 1994 when two navy veterans, Richard (Dick) Lee, now 71 and Tom Guschke, now 66, were working on a CMOPS (drugs by mail) project for the VA in Kansas City. They were frustrated by how slow and cumbersome handling round vials were compared to their previous experience automating the handling and sorting CDs and Cassettes at BMG Music speeds of 240 per minute. Surveying the market for sortation systems and reviewing the postal regulations, they labored to create a package that could be handled as a machinable flat through Postal Automation for the next 18 years.

Along the way, Bill Negrini, former president of Owens-Illinois Healthcare Packaging and Patrick Eidemiller joined the team. Between the four of us, we have over 200 years of collective experience in packaging, logistics, and process improvement.

Determined to make a difference against the resistance to change, Mpack Systems is a small start-up company that believes in the benefits of our package and its ability to:

- be profitably and safely handled by the Post Office,
- save the tax payer substantial amount of money between:
 - direct shipping and handling costs, and
 - improved outcomes through better patient compliance and adherence
- reduce costs through the elimination of manual pharmacy processes
- provide a safer package for the consumer

Benefits of Prescriptions by Mail

Prescriptions filled at retail totaled 3.7B in 2011 and some estimates put Mail Order at least 20% of the total...around 900 million. The single largest user of mail order pharmacy is believed to be the US Government considering VA, Military, Medicare and the rest of public health.

Studies indicate that mail order prescriptions **cost 21% less** to fill than a traditional retail pharmacy, see Exhibit 8. In addition, studies also indicate that individuals that get their refills by mail are much more compliant than individuals that refill through retail pharmacies. A UCLA/Kaiser Permanente Study **indicated 7% better compliance** through mail order, see Exhibit 13.

Challenges of Prescriptions by Mail

Traditional round vial packaging doesn't allow for sequencing at the point of fill like the m-pack® mailer, so additional sorts are required between the source and the consumer. The flat mailer allows for prescriptions to be sequenced at the point of fill and maintain that integrity all the way through the postal process.



Figure 1. Mpack Mailer Can be Sequenced by Zipcode and carrier at Point of Mailing



Figure 2. "Pop-Offs" Are an Issue in the Mail

There are two additional issues with traditional round vials when shipped through the mail,

- Crushing, where the vial actually breaks and spills its content into the envelope
- Pop offs, where the top comes completely off the vial.

Both presents a hazard for the mail system and, if more than one vial is compromised, the risk that the right drug gets back into the right vial.

Impacts of Improved Compliance

Compliance and Adherence is measure of often people take their prescription drugs and the reality is most of the population is terrible at maintaining their drug regiment.

And better compliance means better outcomes, which lowers overall healthcare costs. Studies put the cost of non compliance from between \$100B, Exhibit 9, The New England Journal of Medicine 2005, and a more recent, often-sighted study the

New England Healthcare Institute quantifies an economic cost \$290 billion per year for noncompliance.

"NEHI estimates that nonadherence along with suboptimal prescribing, drug administration, and diagnosis could result in as much as \$290 billion per year in avoidable medical spending or 13 percent of total health care expenditures."

- "Thinking Outside the Pillbox A System-wide Approach to Improving Patient Medication Adherence for Chronic Disease"
 A NEHI Research Brief – August 2009"

See Exhibit 4.1.

Flats Versus Parcel

The USPS provides better rates for Flat Mail than Parcels. The rates below are from the USPS Website for Commercial Flats as of 05/16/2014.

First-Class Mail - Commercial – Flats
 As of May 16,
 2014

Weight Not Over (ounces)	Automation			*Mixed		Nonauto Presorted
	5-Digit	3-Digit	ADC	ADC	ADC	
1	0.451	0.634	0.691	0.782	0.815	
2	0.659	0.842	0.899	0.99	1.023	
3	0.867	1.05	1.107	1.198	1.231	
4	1.075	1.258	1.315	1.406	1.439	
5	1.283	1.466	1.523	1.614	1.647	
6	1.491	1.674	1.731	1.822	1.855	
7	1.699	1.882	1.939	2.03	2.063	
8	1.907	2.09	2.147	2.238	2.271	
9	2.115	2.298	2.355	2.446	2.479	
10	2.323	2.506	2.563	2.654	2.687	
11	2.531	2.714	2.771	2.862	2.895	
12	2.739	2.922	2.979	3.07	3.103	
13	2.947	3.13	3.187	3.278	3.311	

*Mixed ADC

(1) A presort level in which all pieces in the bundle or container are addressed for delivery within the service areas of more than one area distribution center (ADC). (2) Working mail that USPS sorts further. (3) A price category available for some mail classes or products prepared at a mixed ADC presort level.

NDC

A highly mechanized and automated mail processing facility formerly designated as a bulk mail center. NDCs are classified as Tier 1, Tier 2, or Tier 3 sites. Tier 1 sites handle the distribution of local (turnaround) and destination Standard Mail, Periodicals, and Package Services pieces. Tier 2 sites have Tier 1 responsibilities and handle the distribution of Standard Mail, Periodicals, and Package Services pieces locally and to the network. They also handle surface transfer center containerization and dispatch

operations of outgoing and incoming Priority Mail, First-Class Mail, Periodicals, and Standard Mail pieces. Tier 3 sites have Tier 1 and Tier 2 responsibilities and serve as consolidation points for less than truckload volumes from Tier 2 sites.

HR 3204-The Drug Safety and Security Act.

This past year, The House passed HR3204, the Drug Security and Safety Act, a measure that is way over due and most in the industry are pushing back as unrealistic. The reality is that this is an important step in addressing many of the shortcomings of the current prescription supply chain. Unlike nearly any other consumable product, they don't package integrity between producer and consumer and limited traceability. This graphic sums it up.

Which of these two packages are tamper evident?



The water is, the prescription isn't.



This vial is, with a serialized pedigree from the patient back to the original manufacturer. Pedigree and lot control disappear at the back door of the pharmacy. Retail pharmacies are not subject to the same FDA standards as manufacturing facilities. Starting in 2015, the FDA is tightening up the standards, and most retail pharmacies are not equipped to comply, which will place even more emphasis on mail order.

Customer safety isn't an undue burden on industry. Track and trace is not an undue burden. One of customers, Prescript Pharmaceuticals has been doing serialized lot control since the 1970s.

Patrick Eidemiller

Professional Bio

May 2014

Boston Retail Partners

Current employed as Senior Manager, Supply Chain Practice, Boston Retail Partners assisting clients in improving their distribution and logistics operations to reduce cost and improve efficiency.

Over 20 years delivering supply chain solutions to a wide cross section of retail, direct and multi-channel apparel, footwear and consumer product companies in 10 countries around world.

Professional expertise includes material handling systems, fulfillment operations, facility planning and plant layout, systems integration, supply chain optimization, operations analysis, network modeling, performance metrics, process improvement, software systems, implementation management, capital budgeting, and ROI analysis.

Created integrated warehouse management and material handling systems documentation for many major retail and apparel manufactures throughout the Americas and Europe. Documented existing processes, procedures and systems baseline comparing against best in class for cost, cycle time and efficiency, determining impediments to improved performance and Gap analysis of current systems. Based upon Gap lists, determined to upgrade existing systems or create RFP for new systems, processes and procedures.

Redesigned direct to consumer distribution fulfillment processes and retail distribution centers for many specialty apparel retailers, typically moving from labor intensive manual process to fully automated system. Typically reducing labor cost per unit up to one-third while simultaneously increasing capacity three fold and reducing order to ship by 36 hours, reductions in distribution center square footage requirements up to 50% and achieved payback quickly as 11 months on a multi-million dollar investment.

Mpack Systems

Shareholder and partner in Mpack Systems, a healthcare startup bringing the first new compliance package to pharmacy since the introduction of the child resist cap in the 1950s. At Mpack, Patrick puts a "square box in a round hole" applying his background in engineering and technology background to facilitate adoption of the m-pack® vial and leverage it's unique capabilities in the pharmacy supply chain to improve pharmacy efficiency while increasing patient safety and compliance.

Committee on Oversight and Government Reform
Witness Disclosure Requirement – "Truth in Testimony"
Required by House Rule XI, Clause 2(g)(5)

Name: FATRICK EIDEMILLER

1. Please list any federal grants or contracts (including subgrants or subcontracts) you have received since October 1, 2011. Include the source and amount of each grant or contract.

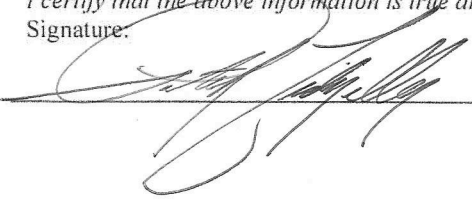
NONE.

2. Please list any entity you are testifying on behalf of and briefly describe your relationship with these entities.

MPACK SYSTEMS, LLC, SHAREHOLDER, PARTNER

3. Please list any federal grants or contracts (including subgrants or subcontracts) received since October 1, 2010, by the entity(ies) you listed above. Include the source and amount of each grant or contract.

NONE.

I certify that the above information is true and correct.
Signature: 

Date: 05/19/2014