

Foreign Object Damage (FOD) Prevention



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For what it's worth...

“FOD control in civilian
aviation is a joke.”

- LtCol, USMC Aviator
(Ret)



The cliché collection

- FOD Prevention is our number one priority!
- It's a team effort.
- Communication is key.
- KISS.
- A holistic approach...
- Every situation is different.
- There's no right answer.

The problem

Symptoms:

- Turbine and propeller wear and damage.
- Tire damage.
- Engine wear and damage.



The causal factors

- Ineffective or no FOD prevention program
- Pavement deterioration
- Un-vegetated, rocky, sandy soil
- Infrequent pavement inspections
- Poor housekeeping
- Unrestricted vehicle traffic in aircraft operations areas (AOAs)

The answers

An effective FOD Prevention Program:

- Is multi-tiered
- Is continuous
- Has multiple participants
- Is formal (*i.e.* – written down, published, and communicated)

The answers (cont'd)

Pavement condition:

- FAA requires a Pavement Maintenance Program for all public airports.
- Poor pavement quality or condition promotes FOD production.
- Pavement sealing or rejuvenation can help mitigate the problem.
- Mill and overlay of poor quality pavement is best.

The answers (cont'd)

Surrounding vegetation and soil conditions:

- Can be a big contributor, but not easily addressed.
- Mitigate un-vegetated areas

The answers (cont'd)

Pavement inspections:

- EASY!
- Guaranteed effective!
- Least costly!
- Must be followed up by short and long term actions.

The answers (cont'd)

Housekeeping:

- EASY!
- Guaranteed effective!
- Least costly!
- (Sound familiar?)

Equipment

FODMaster

- American made
- Inexpensive
- Simple
- Easily deployed
- “Spot treatments”



Equipment



Attachment to a Bobcat brand utility vehicle

- Does not include a vacuum
- Does not rotate
- Has to be picked up after push / sweep

Services



Street sweeper contractor

- Vacuum equipped
- Quarterly treatment
- Inexpensive*
- Apron, taxilanes, and airside vehicle roads

Results

- Top picture taken on May 12, 2010
- Bottom picture taken on June 16, 2011
- Same aircraft
- Unsolicited compliment on the program effectiveness from the aircraft pilot



Work in progress

Still to do:

- Formalize – write it down!
- Placement of FOD Buckets throughout the airport
- Expand program to include:
 - FBO
 - CAP Squadron
 - Tenants
 - EAA Chapter

Thank you

Questions?

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