Gail Zlotky De-Icing History and an underappreciated science



Ropes (1910's and 1920's)

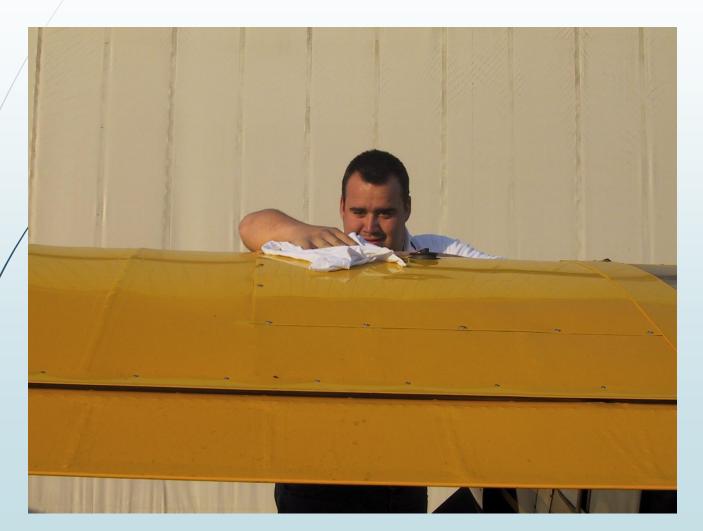


Airline Operations Workshop

Mop and Bucket (1920's-1940's)



Kilfrost Paste (1940's-1960's)



Trucks (1960's - Present)



Multi Truck Deicing



Infrared Deicing



Fluids

- There are four types of fluids
 - > Type I
 - > Type II
 - > Type III (not used in the US)
 - > Type IV
 - > Testing certification
 - > Certification

Ice Cameras

- Very few on the market
- Majorissues
 - unable to completely detect ice accurately
 - Need additional light for night operations

Training

Usually done in the summer

- > Volunteers
- Ramp staff
- Baggage handlers
- > Long delay till first event

Hand Checking

- All this technology and still required to hand check for frost and or ice
- A ladder must be put against the plane and a hand or a stick used to check for ice

WEATHER

- METARS used for weather information
- Code not usually taught
- Definition of snow freezing rain, UP, etc.
- Not taught or not known
- How do you plan to deice when you don't know what the precip is?
- The only communication is from the deicer to the pilot
- Dispatch out of the loop
- ATC limited information
- No one is watching the process
- Airport limitations

The Future and Technology

- All this technology and still having issues.
- Where to we go from here
 - Build a camera that will work
 - connect camera to a data base that can ID aircraft and verify that it is configured correctly

 - → Station as close to runway as legal
 - Eliminate voiding of hold over time

The Future

