

Runway Conditions to be on the Lookout for

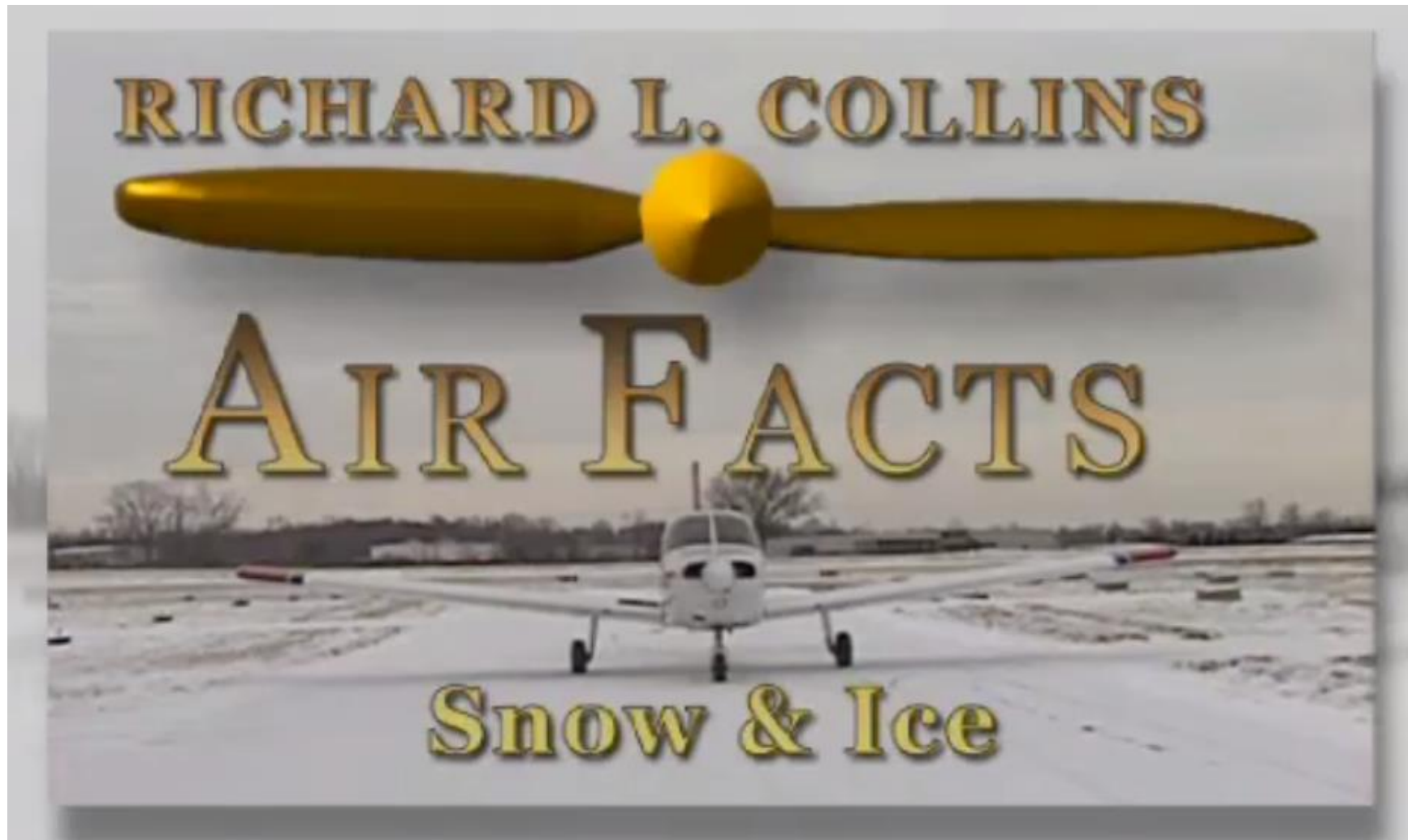
- Wet runways
- Snowy or slush covered runways
- Braking action reported as “poor”
- Over one half inch of wet snow or slush on the runway
- Dry snow greater than four inches is on the runway
- Frost Heaves
- Wild life
- Mud



GRANT AVIATION

BI-12-C Aircraft Performance Airports

Sporty's Video – Air Facts Snow and Ice (20 minutes)



Contaminated Runways

Surface conditions affect both takeoff and landing distances.

- Rolling resistance from a rough or soft surface lengthens the takeoff roll.
- Braking effectiveness on wet runways is reduced by 30 – 60%.

Hydroplaning is the worst situation to lose brake effectiveness.

- Thin layer of water separates the tires from the runway.
- Spring wx can create a situation with standing water on an ice cover runway.
- $8.6\sqrt{(\text{tire pressure})}$ = the hydroplaning groundspeed.
 - $8.6\sqrt{(55\text{psi})} = 64 \text{ KIAS}$
 - Short Field T.O. Speed is 66 KIAS at maximum weight.
 - Short Field Landing approach to flare is 78 KIAS

Contaminated Runways

GOM 8-23 All of these should be considered prior to dispatch:

- Takeoff or Landings will not be attempted with braking action reports of “NIL”
- No braking action reports on icy runways is considered “NIL”.
- Wet Runway
- Snowy or Slush covered Runways
- Braking Action of “POOR” is reported.
- Over ½” of wet snow or slush is on the runway.
- Over 4” of Dry Snow is on the runway.

Contaminated Runways

- Dispatch agents collect and post weather and NOTAMs periodically throughout the day.
- The PIC is responsible to make sure the information is current and has all information possible for the destination.
- NOTAM web site

<http://pilotweb.nas.faa.gov/distribution/home.htm>.