

## T-28 Pilot Report

Flight: 668  
Date: 06221995  
Flight Time: 17:11 – 18:06 MDT  
Pilot: Charlie Summers  
Controller: Dennis Musil  
Location: Loveland, CO  
Mission: Research flight

Computer Time	Video Time	Comments
16:50		35 dBZ return to 40 kft in storm to N of CHILL. Call to launch T-28. (Different storm than one in which sailplane operated.)
17:11		Take-off
17:13:59		Field mill test on for 2 min 16 sec (clear air)
17:20		T-28 heard passing over CHILL. Target storm is just to N of CHILL at this time
17:27:09		In-cloud, Pen #1; 020° hdng, 150 kts IAS, 13 kft alt
17:28:12		Hvy turb; hvy rain
17:29:10		30 sec burst of hail; updrafts
17:29:42		Out-of-cloud
		Turn to 090°.
		90/270 turn to reverse course
17:31:47		Ltng & hail outside of cloud in the clear
17:31:53		In-cloud, Pen #2; 240° hdng; 140 kts IAS; 13 kft alt
17:32:25		Ltng
17:32:29		Big hail
17:33:36		10° left
		Hvy turb
17:33:38		Out-of-cloud; 240° hdng; 150 kts IAS; 13.1 kft alt
		90/270 turn
17:35:43		In-cloud, Pen #3; 060° hdng; 130 kts IAS; 13.2 kft alt
		Hvy turb
		Turn right to 070°
17:37:03		Out of hvy hail
17:37:55		Out-of-cloud; 070° hdng; 150 kts IAS; 13.1 kft alt
		Reverse course
17:43:21		Hail in clear outside of cloud
17:43:40		In-cloud, Pen #4; 225° hdng; 150 kts IAS; 15 kft alt
		Turn right to 230o
17:44:25		Hvy turb
		Hvy hail
		Lgt icing
17:45:29		Out-of-cloud; 235° hdng; 150 kts IAS; 15.2 kft alt
		Reverse course
17:50:27		In-cloud, Pen #5; 030° hdng; 130 kts IAS; 15.1 kft alt
17:50:56		Hvy turb; 2000 ft/min up; need to nose down to hold altitude
		Smooth ride

		Turn 10° to right
		Oil cooler door flap open. Contact with Dennis lost on COM1.
17:53:47		Out-of-cloud; lgt icing on wings. Rapid descent.
		RTB FNL
18:06		Land

## ***NOTES***

### Weather

Thunderstorms form on Foothills even before noon. Continue into afternoon. . Low level winds are light easterly; upper winds strong southwesterly. T-28 encountered hail with peak sizes between 1”-2”. Surface observers noted similar sizes. In general comments after the flight, Charlie noted that he was pitched down and still gaining altitude at 3000 ft/min in the updrafts. He estimates peak updraft speeds at 6000 ft/min.

### Maintenance

Dents were accumulated all over the un-armored parts of airframe. King probe sensing element was bent and stopped functioning near 17:36:30. There were no serious consequences from the oil cooler door opening at the end of the last pass.

### Operations

NCAR sailplane went out at ~15:00 MDT to hunt around over Foothills west of FNL (Loveland). Was released at 16:17 near the CSU airfield near 12 kft alt. By 16:28 he had ascended to 20 kft in a storm 50 km NW from CHILL. Had to leave cloud then because of iced-up pitot.

T-28 launched with a different storm as a target and completed 5 passes of a vigorous thunderstorm just north to north east of CHILL. No p-static problems on this flight. Hail could be heard on both the windscreen mike and on Charlies mike at times during the flight. Combination of hail and turbulence was the likely cause of the oil cooler door opening at the end of the 5<sup>th</sup> pass. This event and loss of contact with Dennis at the CHILL radar site prompted Charlie to RTB after the 5<sup>th</sup> pass.