

T-28 Pilot Report

Flight: 667
Date: 06201995
Flight Time: 15:58 – 17:14 MDT
Pilot: Charlie Summers
Controller: Dennis Musil
Location: Loveland, CO
Mission: Research flight

Computer Time	Video Time	Comments
15:58		Take-off
16:01		Field mill test
16:15:40		In-cloud, Pen #1; 120° hdng; 130 kts IAS; 16 kft alt
		Lgt turb
16:16:35		100° hdng; 130 kts IAS; lgt turb
16:16:43		090° hdng, 130 kts IAS; 16 kft
16:17:09		Mdt turb; updrafts to 500 ft/min
16:17:17		Lgt rime
16:18:22		Out-of-cloud
		90°/270° turn to go back through
16:20:30		In-cloud, Pen #2; 310° hdng; 120 kts IAS; 17 kft alt
16:21:17		Go left to 280° hdng
16:21:43		Go left to 270° hdng; lgt turb
16:21:54		Ltng
16:22:06		Lgt rime ice; 500 ft/min up
16:22:15		Mdt turb
16:23:12		Mdt turb
16:23:22		Out-of-cloud; 270° hdng; 130 kts IAS; 17 kft alt
		90°/270° turn to go back through
16:25:29		p-static
16:25:32		In-cloud, Pen #3; 080° hdng; 140 kts IAS; 17 kft alt
16:26:20		½" rime ice
16:27:31		Climb to 17.5 kft
16:28:38		Out-of-cloud; 080° hdng; 140 kts IAS; 17.4 kft alt
		90°/270° turn to go back through
16:30:35		In-cloud, Pen #4; 260° hdng; 135 kts IAS; 17.5 kft alt
16:31:10		Go left to 250° hdng
16:31:26		Lgt rime ice up to ½"
16:31:52		Lgt turb
16:32:20		Ice and soft hail; mdt turb; 500 ft/min up
16:32:54		Out-of-cloud
		90°/270° turn to go back through
16:34:42		In-cloud, Pen #5; 070o hdng; 130 kts IAS; 17.7 kft alt
16:35:10		Mdt turb
16:35:20		Rime ice; p-static; 1000 ft/min up
16:36:55		Out-of-cloud; 060° hdng; 140 kts IAS; 17.5 kft alt

		Reverse course to left
16:37:44		In-cloud, Pen #6; 260° hdng; 130 kts IAS; 17.5 kft alt
16:38:21		250° hdng; 120 kts IAS; 17.4 kft alt
16:38:47		p-static; mdt turb
16:39:40		Out-of-cloud; 245° hdng, 150 kts IAS; 17.5 kft alt
		Reverse course to right
16:41:08		In-cloud, Pen #7; 080° hdng; 140 kts IAS; 17.8 kft alt
16:42:35		p-static
		Turned to 060° hdng
16:44:03		Out-of-cloud; 060° hdng; 140 kts IAS, 17.5 kft alt
		Reverse course to left
16:45:06		In-cloud, Pen#8; 250° hdng, 140 kts IAS, 17.3 kft alt
16:45:28		Go left to 230° hdng
16:46:33		p-static & ltng
		Most turb on W side coming out of storm
16:47:51		Out-of-cloud; 230o hdng; 140 kts IAS; 17.5 kft alt
		Reverse course to right
16:48:51		In-cloud, Pen#9; 060° hdng; 17.8 kft alt
		Small buildup W of storm he has been penetrating
16:49:05		Out-of-cloud
16:49:16		In-cloud, Pen #10; 070° hdng, 140 kts IAS, 17.5 kft alt
16.49.48		Turn to 050°
16:50:21		Lgt rime ice; ltng
16:50:35		Turn to 060°
16:50:49		Light/soft hail
16:51:49		Out-of-cloud; 060° hdg; 135 kts IAS, 17.6 kft alt
		Reverse course to left
16:52:41		In-cloud, Pen #11; 240° hdng; 140 kts IAS, 17.2 kft alt
16:52:58		Turn to 230°
16:53:07		Mdt turb; ltng; lgt icing
16:54:55		Out-of-cloud; 230° hdng; 150 kts IAS; 17.5 kft
		Reverse course to right
16:56:03		In-cloud, Pen #12; 070° hdng; 140 kts IAS, 17.5 kft alt
16:56:42		Turn to 060°
16:58:56		Out-of-cloud; 055° hdng; 140 kts IAS; 17.3 kft
		Reverse course to left
17:00:06		In-cloud, Pen #13; 250° hdng, 120 kts IAS; 17.5 kft alt
17:00:35		Light hail
17:03:05		Out-of-cloud; 250° hdng; 130 kts IAS; 17.6 kft alt
		Out of alcohol
		Discover that gauges are frozen; low on gas; RTB
		Ice melts off at 13 kft on descent; fuel gauges back on
17:14		land

NOTES

Weather

Storms formed to the E of CHILL in mid-afternoon on an outflow boundary from an earlier storm. Cells moved NEwd during mission. Grew from CuCong to Cb stage during mission.

Maintenance

Vents in fuel system iced over; leading to erroneous fuel readings near end of flight

Operations

Attempted to do penetrations on radials from/toward CHILL. There were 13 passes in all. Pilot notes that turbulence was light to moderate; rime ice built up on airframe to 1 ½ “ towards end of flight; there was some lightning; there was trouble with p-static; rain was light to moderate; and there was soft hail in low concentrations. He also noted some ice buildup on tips of HVPS.