T-28 Pilot Report

Flight: 625
Date: 05291994
Flight Time: 08:20 – 09:45
Pilot: Dan Custis
Controller: Dennis Musil
Location: Norman, OK
Mission: Research flight

Computer Time	Video Time	Comments
07:00		Storm leading edge of storm ~ 20 nmi S of Norman and moving SE. Looks like best initial point might be Chickasha
07:22		Leading edge ~42 nmi S of Cimarron
07:42		Rain ending at Norman
08:00		Leading edge getting to 60 nmi from Cimarron
08:20		Take-off
08:22		Deviate to heading 180°
08:25		Brief cloud pass; 60 km S of Cimarron radar; altitude 2.5 km MSL; 13°C
08:27		Approaching altitude 10 kft; T ~ 12°C
08:32		Brief cloud pass; 95 km S of Cimarron radar; 3 km altitude; 8°C
08:36		Start penetration of main echo body from back (N) end; hdng 170°. Position 158°/115 km from Cimarron; T = 7°C.
08:40		SEA computer on aircraft hung; Dan reboots. Could have been caused by large number of hail spectrometer images being acquired at this time.
08:43		Turning in-cloud and climbing to 11 kft; going back through to N. 158°/145 km from Cimarron; T = 4°C.
		Hdng 350°; mdt rain; P-static
08:46		At 155°/110 km from Cimarron; out of main echo; trying to get Dan to turn to 020° but he's too far NW of storm; 11 kft altitude; P-static
08:51		Reversed course to head back into storm. Hdng 170°; 155°/135 km from Cimarron; 6°C
08:55		Reversing in-cloud to hdng 030°; 152°/153 km from Cimarron radar; 4°C; P-static. Most of storm is beyond radar range.
08:58		Out-of-cloud; turning to hdng 150°; located at 145°/150 km from Cimarron
09:04		Taking a heading of 240°. Position 140°/162 km from Cimarron. T = 2°C; P-static;ltng
09:07		Out-of-cloud at position 147º/150 km. Reversing course.
09:10		Reversing course to hdng 060°. In-cloud. Dan can't find core of storm. P-static; ltng;mdt turb
09:14		Out-of-cloud at location 145°/173 km from Cimarron. T=0°C.
09:16		Take up heading to return to Norman
09:45		Landed

NOTES

Weather

Heavy rain with thunder/lightning at Norman at 6 AM. Storm moved from NW to SE over Norman Temperatures at a given altitude were 3-4°C higher ahead of the storm.

Maintenance

Hail imaging quit after first pass.

Operations

Could not have taken off much earlier than we did, due to rain at Norman. Air-ground communications difficult due to long-range.