UPDATED

Confirmed Tornado
Orangeville, Ontario
August 30, 1970

Date- Local: Sunday, August 30th, 1970
UTC: Sunday, August 30th, 1970
Time- Local: 1810
UTC: 2210
Location: Vicinity Orangeville
Region: Dufferin - Innisfill
Classification: Confirmed Tornado
Category: -999
Casualties: None
Track Length: 25680 m
Width: None available
Motion: 285
Damage Estimate: None available
F-Scale Rating: F2
Code: AH, BS
Damage Survey: Yes
Spotter Reports: None
Other Documents:
Survey notes
Two newspaper articles
Map of tornado track
Newark summary sheet

Tornado F-Scale Re-Assessment

Brad L. Rousseau
Tornado Data Production Assistant, Environment Canada
January 25th, 2011

Classification: Confirmed Tornado
Date: Sunday, August 30th, 1970
Location: Vicinity Orangeville, Dufferin – Innisfill Region

Original Assessment: F1
Re-Assessment: F2
F-Code: AH, BS
Explanation of Assessment: Roof was removed from homes and barns were destroyed. One home was moved off its foundation and a 4.25 ton combine was pushed 20 ft. Fits into F2 category in the Wind Damage Rating table.

SJS

B

TORNADO PROJECT SUMMARY SHEET

F=1 ONT

1. DATE AND TIME: AUG 30, 1970 1710 EST

2. LOCATION OR PATH (attach map): VCNTY ORANGEVILLE — CALEDON — KILMANAGH

0697009

3. PATH LENGTH: ☐ NOT KNOWN ☐ <1mi; ☐ 1-4mi; ☐ 5-10mi; ☐ 11-50mi; ☐ LENGTH IF>50mi

4. PATH WIDTH: 15 ft. 5. TORNADO PART OF SQUALL LINE? ☐ YES; ☐ NO; ☐ UNKNOWN:

6. ANY UNUSUAL COLORATION? ☐ YES; ☐ NO; ☐ UNKNOWN

7. ANY UNUSUAL SOUND? ☐ YES; ☐ NO; ☐ UNKNOWN

8. IF ANSWER TO 6 OR 7 YES, ELABORATE; GREEN SKY, RUMBLE LIKE A JET.

9. LIST ANY ASSOCIATED PHENOMENA (Such as hail, vivid lightning heavy rain, no rain, etc.)

10. TOTAL DAMAGE ESTIMATE $ 11. TOTAL DEATHS

12. TOTAL INJURED 13. TOTAL HOMELESS

14. LIST ALL REFERENCES

TORONTO STAR, SEPT 4, 1970
BRAMPTON DAILY TIMES, SEPT 4, 1970
FIELD INVESTIGATION AND PERSONAL VISIT WITH TREVOR HENRY, by M.J. Newark and P.J. Elms. September 1978.

15. SUMMARIZE REMARKS PERTAINING TO (a) FUNNEL; (b) INTERESTING OR CAPRICIOUS EVENTS.

(a) no remarks

(b) Barns flattened, roofs removed, trees uprooted. A house moved off its foundation. Forage wagons, trucks carried through the air. A 4 1/4 ton combine was pushed 20 feet into a barn at the Trevor Henry farm. Roof debris from his farm was carried 12 miles into the Caledon fair grounds.

WORKSHEET

IDTO 0697009

(1) ORIGIN x 17565400
y 4860050

(2) LIFT-OFF x_1 17589950
y_1 4853600

(3) $(x_1 - x)$ = 24550

(4) $(y - y_1)$ = 6400

(5) Standard Error S_x 300 C

(6) Standard Error S_y 30C

(7) DAMAGE LENGTH

$$L = [(x_1 - x)^2 + (y - y_1)^2]^{1/2}$$

(3)+(4) $\boxed{\rightarrow r,\theta}$ = 25371 m

(8) $\alpha = \tan^{-1} \dfrac{|y - y_1|}{|x - x_1|}$

$\boxed{x \leftrightarrow y}$ = 15°

(9) Standard Error $S_L = (S_x^2 + S_y^2)^{1/2}$

(5)+(6) $\boxed{\rightarrow r,\theta}$ = 301 m C

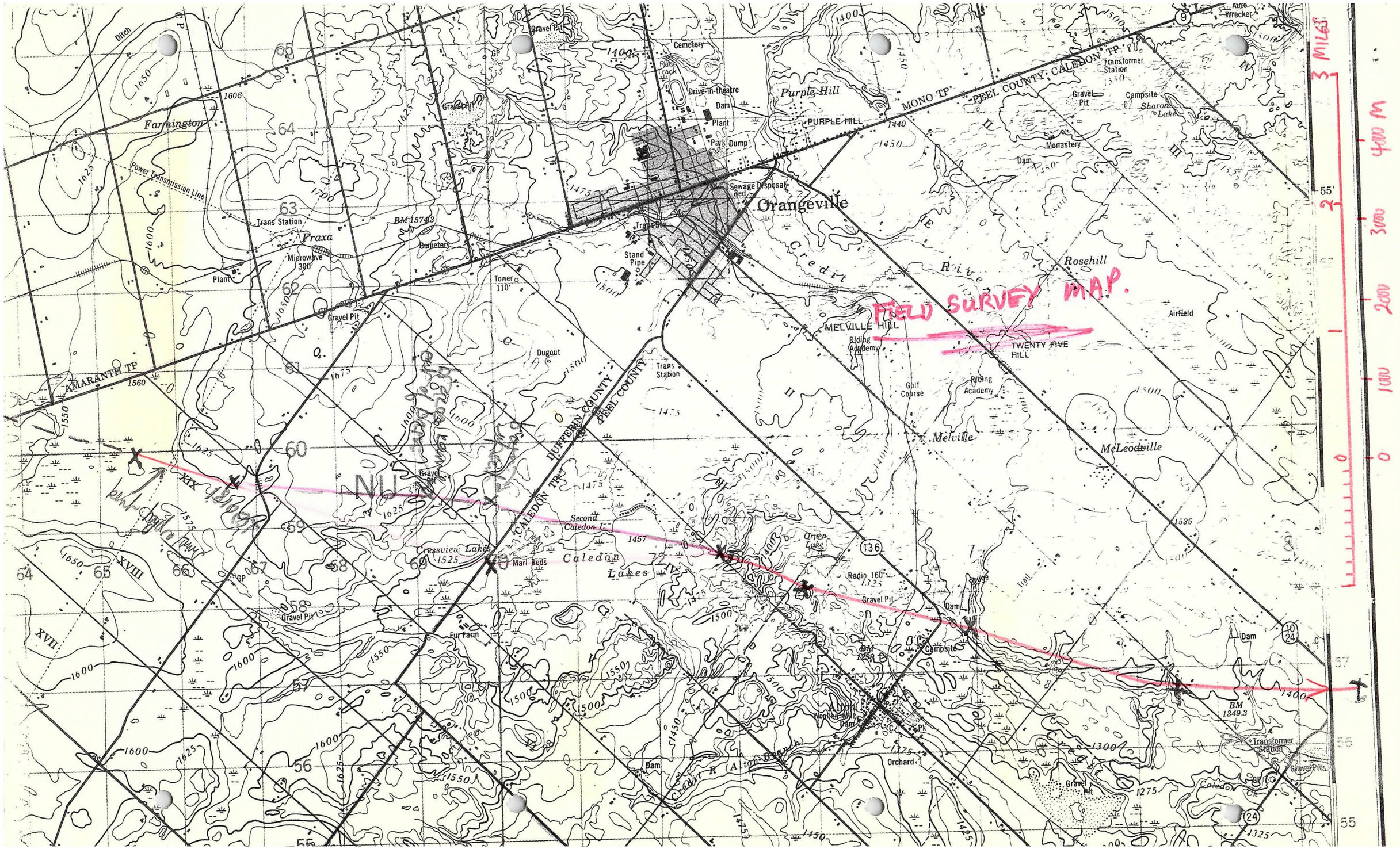
(10) $\beta = \dfrac{\tan^{-1} S_L}{L}$

(7)+(9) $\boxed{\rightarrow r,\theta}$
$\boxed{x \leftrightarrow y}$ = 1°

NE Quad $\phi = 90 - \alpha$
NW Quad $\phi = 270 + \alpha$
SW quad $\phi = 270 - \alpha$

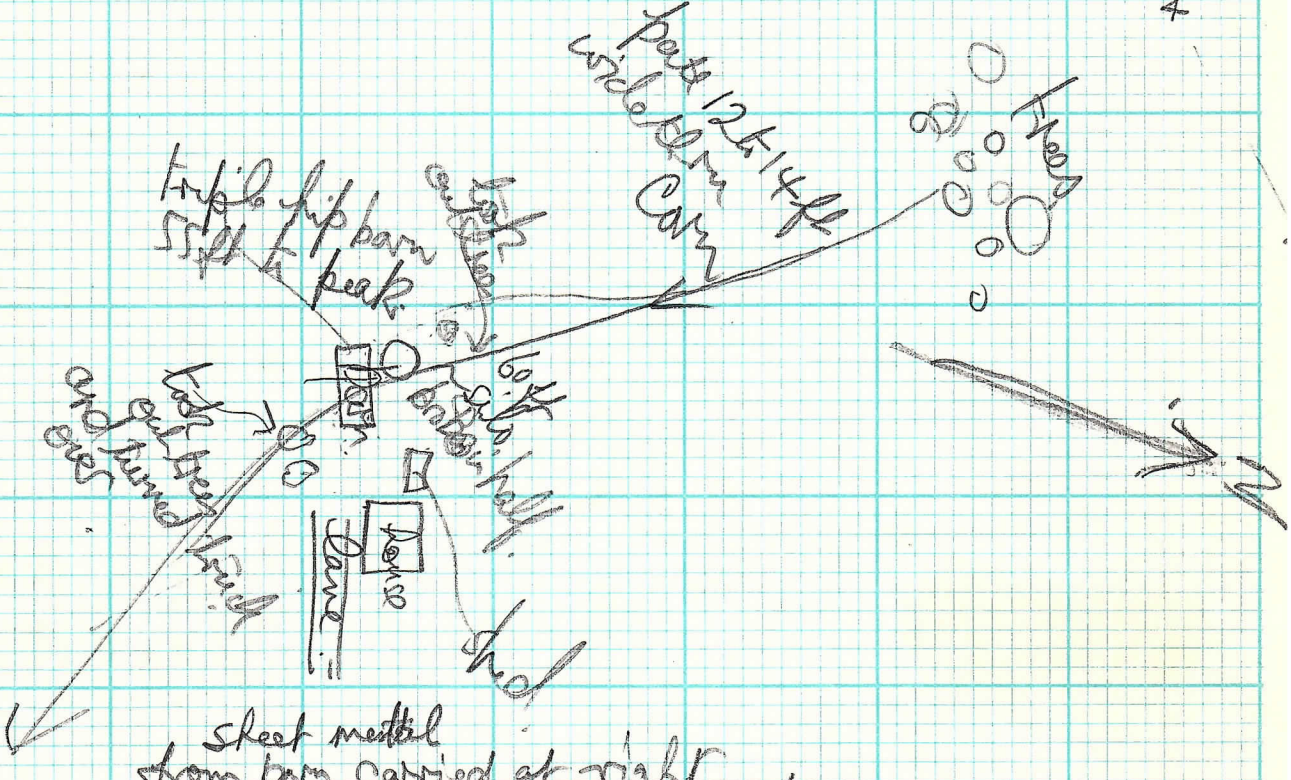
SE quad $\phi = 90 + \alpha$

(11) ϕ = 285°


FIELD SURVEY MAP.
3 MILES
400 M
3000
2000
1000
0
Orangeville
Purple Hill
Farmington
Fraxa
Rosehill
Melville
McLeodville
Caledon Lakes
Cressview Lakes
Second Caledon L.
Credit River
PEEL COUNTY
CALEDON TP
MONO TP
AMARANTH TP
HUMPHREY COUNTY
PEEL COUNTY
MELVILLE HILL
TWENTY FIVE HILL
PURPLE HILL
Power Transmission Line
Sewage Disposal Bed
Trans Station
Transformer Station
Golf Course
Riding Academy
Airfield
Monastery
Campsite
Sharon Lake
Gravel Pit
Cemetery
Race Track
Drive-In-theatre
Dam
Plant
Park
Dump
Stand Pipe
Tower 110'
Microwave 300'
BM 1574.3
BM 1349.3
Mari Beds
Fur Farm
Orchard
Radio 160
Auto Wrecker
Ditch
Dugout
Trail
Bridge
Creek
Caledon Ck
Alton Branch
Northern Hill Dam
Pk
136
10
24
9
55'

Trevor Henry's Farm. Fergus Rd.

Out of 60 tons of barley in barn, only 30 tons left after tornado. Two forage wagons carried 20 or 30 feet by the air they fell on their corner and bent out of line. Roof debris carried 22 miles into Caledon fair grounds. 4/4 ton combine pushed 20 feet into barn.



Nov 4 1980 P. Elmo phone conversation

From Dr Pudgeon - Vet at Orangeville

A silo blown down on Lot 15. ?

Caledon Tornado.

Aug 30/70 ?

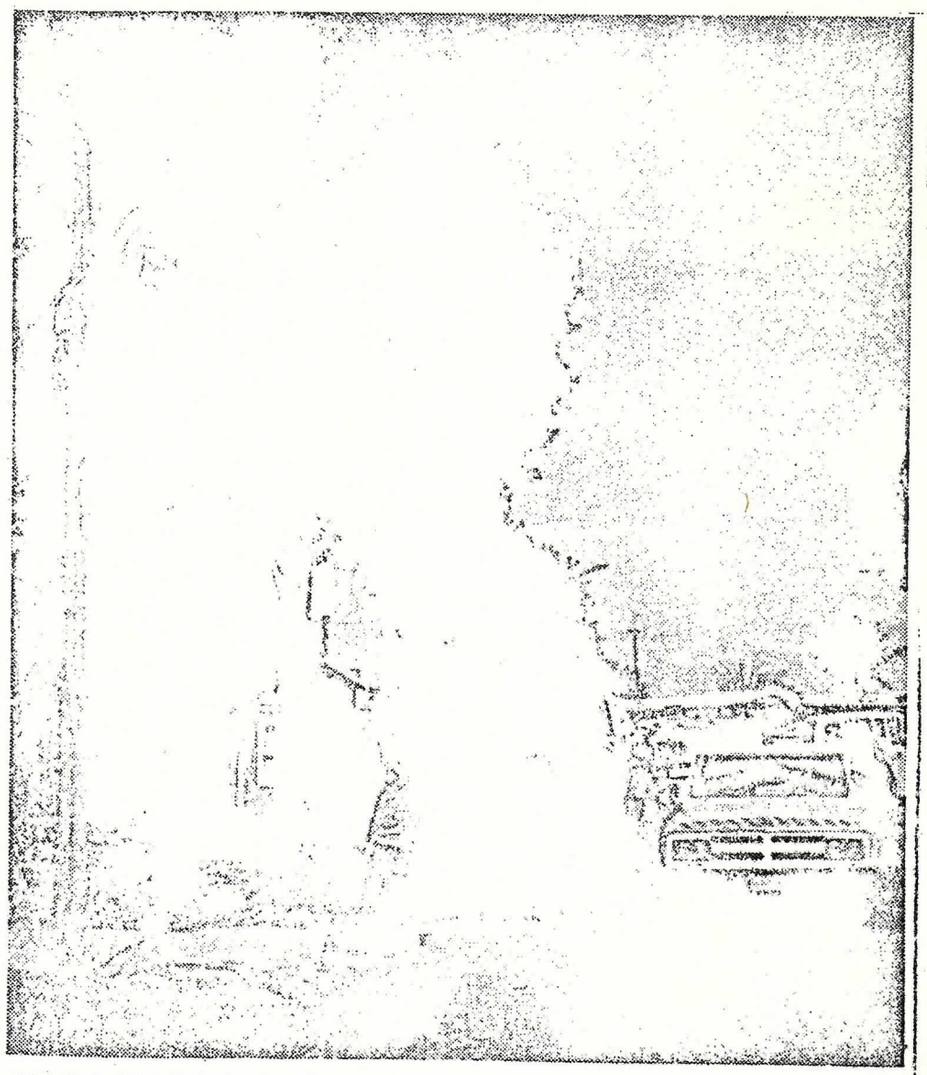
Ontario Hydro Press Clipping Service
Paper BRAMPTON DAILY TIMES
Date SEP 1 1970
Source Central Region

715-2

DM Sparrow
file for
timing?
D

SEP - 4 1970

C



FALLEN HYDRO and telephone lines were common throughout the village of Caledon as the twister cut a six-mile swath through Caledon Township. The storm began at 6:13 p.m. and the twister winds lasted only about 10 minutes but did thousands of dollars of damage in the village. Here hydro linesmen repair fallen lines in the village as life began to return to normal yesterday. The storm left the village without hydro from the time the storm struck to about 11 p.m. Sunday nght. It was the worst in the memory of old-time residents of the community.