

UPDATED

---

**Confirmed Tornado**  
**Chepstow - Crawford, Ontario**  
**June 11, 1968**

**Date- Local:** Tuesday, June 11<sup>th</sup>, 1968

**UTC:** Tuesday, June 11<sup>th</sup>, 1968

**Time- Local:** 1900

**UTC:** 2300

**Location:** Chepstow (Vicinity of Hanover) - N of Crawford

**Region:** Grey - Bruce

**Classification:** Confirmed Tornado

**Category:** -999

**Casualties:** None

**Track Length:** 32820 m

**Width:** 20 m

**Motion:** 240 degrees

**Damage Estimate:** None available

**F-Scale Rating:** F2

**Code:** BS

**Damage Survey:** Yes

**Spotter Reports:** None

**Other Documents:**

Damage survey memorandum

Phone interview notes

Newspaper articles, one with photograph

Radar images

Newark summary sheet

---

---

## **Tornado F-Scale Re-Assessment**

Brad L. Rousseau

Tornado Data Production Assistant, Environment Canada

January 26<sup>th</sup>, 2011

---

**Classification:** Confirmed Tornado

**Date:** Tuesday, June 11<sup>th</sup>, 1968

**Location:** Chepstow (Vicinity of Hanover) - N of Crawford, Grey – Bruce  
Region

**Original Assessment:** F1

**Re-Assessment:** F2

**F-Code:** BS

**Explanation of Assessment:** Barn completely flattened and debris carried for ½ mile constitutes F2 rating according to the Wind Damage rating table.

---

SJS

1. DATE AND TIME **JUNE 11 1968 ABOUT 1800 EST.**
2. LOCATION OR PATH (attach map) **VICINITY OF HANOVER, THROUGH BRANT AND BENTINCK TOWNSHIPS FROM ABOUT 240° 06968 - 08**
3. PATH LENGTH ☒ NOT KNOWN ☐ <1mi; ☐ 1-4mi; ☐ 5-10mi; ☐ 11-50mi; ☐ LENGTH IF > 50mi
4. PATH WIDTH ☒ 50'
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;
9. LIST ANY ASSOCIATED PHENOMENA (Such as hail, vivid lightning heavy rain, no rain, etc.) **HEAVY RAIN AT LEONARD LANG FARM.**
10. TOTAL DAMAGE ESTIMATE \$ **U**
11. TOTAL DEATHS **NONE**
12. TOTAL INJURED **NONE.**
13. TOTAL HOMELESS **NONE**
14. LIST ALL REFERENCES **PAISLEY ADVOCATE. JUNE 20 1968  
KITCHENER-WATERLOO RECORD. JUNE 12 1968  
HANOVER POST JUNE 13 1968  
ONTARIO HYDRO REPORT. BY. D.K.A. GILLIES AUG 7/68**
15. SUMMARIZE REMARKS PERTAINING TO (a) FUNNEL; (b) INTERESTING OR CAPRICIOUS EVENTS.

**Hydro towers toppled, trees torn up, buildings damaged.**

# WORKSHEET

IDTO 0696808

① ORIGIN  $x$  17474700  
 $y$  4886000

⑤ <sup>200 C</sup> Standard Error  $S_x$

② LIFT-OFF  $x_1$  17505500  
 $y_1$  4903100

⑥ <sup>200 C</sup> Standard Error  $S_y$

③  $(x_1 - x) = 30800$

④  $(y - y_1) = 17100$

⑦ DAMAGE LENGTH

$L = [(x_1 - x)^2 + (y - y_1)^2]^{1/2}$  ⑧  $\alpha = \tan^{-1} \frac{|y - y_1|}{|x - x_1|}$

③ + ④  $\rightarrow r, \theta = 35228 \text{ m}$

$x \leftrightarrow y = 32^\circ$

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

⑤ + ⑥  $\rightarrow r, \theta = 282 \text{ m C}$

⑩  $\beta = \frac{\tan^{-1} S_L}{L}$

⑦ + ⑨  $\rightarrow r, \theta$   
 $x \leftrightarrow y = 1^\circ$

NE Quad  $\phi = 90 - \alpha$

NW Quad  $\phi = 270 + \alpha$

SW Quad  $\phi = 270 - \alpha$

SE Quad  $\phi = 90 + \alpha$

⑪  $\phi = 238^\circ$

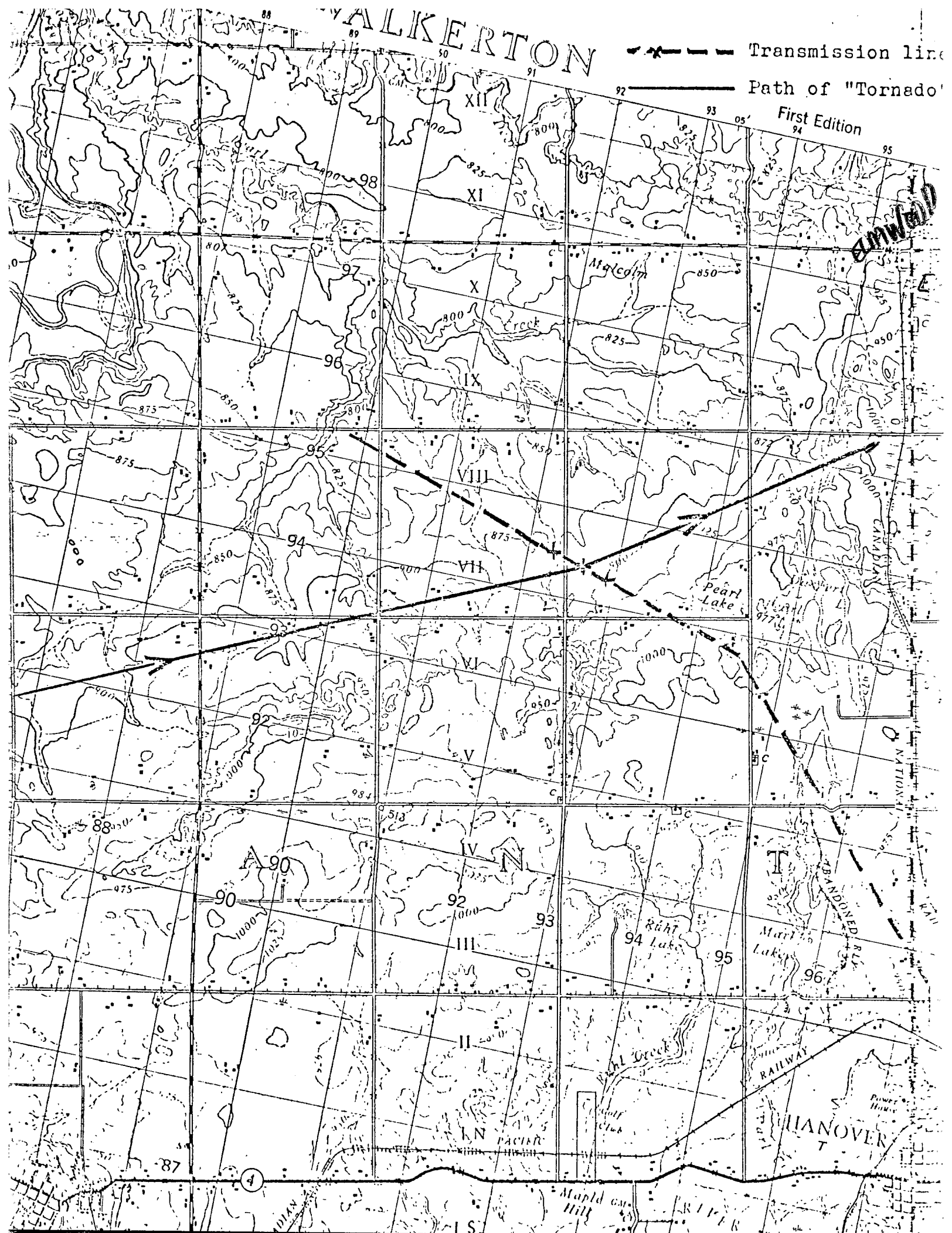
# WALKERTON

Transmission line

Path of "Tornado"

First Edition

unwrapped





Conversation by phone with Mrs. Harold Bowen.  
(519) 881-0894. by P. Elam. on Oct 21/80 regarding  
tornado of June 11 1968.

Every tree that lined a long lane to  
the farm, were severely damaged.

A car was blown against a tree.  
The other window was blown out.  
The barn roof was lifted and then dropped  
down.

Conversation by phone with Mrs Smit  
(519) 881-1857. by P. Elam. on Oct 21/80  
regarding tornado of June 11 1968.

Most of the barn roof was blown off.  
and that which remained was so badly  
damaged, it had to be taken down.

A piece of the barn roof was pierced  
into the driveway.

Conversation with MRS Alfred Lang (519)363-3910  
by P. Elms Oct 16/80, regarding Tornado of  
June 11 1968, and damage to the Leonard Lang farm.

A very black cloud was seen  
approaching but a funnel was not observed.  
Heavy rain was falling.

The barn was flattened, and machinery  
stored inside was carried outside and  
damaged.

Apple trees were uprooted in the  
orchard, and windows blown out of the  
house.

A driveway was lifted off its  
foundation, and rail fences flattened.

Conversation with Mr Albert Gowing (519) 363-6354.  
LOT 26, CON 13 BENTINCK TOWNSHIP.

Mr Gowing stated that his barn roof was removed, but knew of no other damage in the vicinity.

He also recalled a tornado of 1933 in the Heseler area, in Waterloo Township. He mentioned the John Little farm, on the 4<sup>TH</sup> Con. of Puslinch, had a  $\frac{1}{4}$  acre of swamp area flattened.

Mr Gowing was located about 4 miles from Heseler. The SS No 16 Kousuth was at the back of his farm at the time of the tornado, in 1933, he was digging a field and saw a "small black cloud".



August 7, 1968

Filing Memorandum

Visit to Hanover to  
View Storm Damage

Towers No. 127 - 129 on the 230 kv line, Douglas Point to Essa, were found to be tipped over following passage of a thunderstorm at 17:29 EST on Tuesday, June 11.

The writer visited the site to observe the damage from a meteorological point of view and to indirectly determine whether a tornado had been involved and what forces of wind were involved.

Summary

From the damage to trees, barns, etc. in a very narrow band which extended four to five miles along a line SW-NE on either side of the line, the writer concludes that a small tornado-type wind force was involved in this storm damage. The width of destruction appeared to be less than 50 feet, but it appeared to track over tower No. 128 which was the centre tower of the fallen three.

Compared to Other Tornadoes

The width of the damage was very narrow as noted above. It was difficult to find a continuous trail of damage such as noted in previous tornadoes, as at Courtright or Hensall. With the help of conversations with a lady on whose farm the towers fell and some school children at a nearby school, it was possible to determine the direction from which the storms came, and what persons suffered damage.

The lady noted described a wild dust storm which obscured the view, restricted visibility, and made it impossible for her husband to drive his truck down his farm lane on his way to find his son in the back field. When the dust cleared away - apparently no rain had fallen yet - the towers were down immediately in front of his truck, so he backed up and went around by a different route. This dust in the air is indicative of great instability in the air such as occurs in tornadoes and associated water spouts etc. The storm appeared to be all over

(Retyped November 21, 1973)



in less than a minute, which indicates a near-impact force would have been experienced by the tower. A number of trees fully in leaf and up to 8" - 10" in diameter were broken off about 8' above the ground. In another location, two maple trees were toppled over and pulled out by root. A number of partial barn roofs were also torn off.

There was rough continuity in the trail of damage which extended along a line from WSW to ENE (see map).

#### Meteorology of the Occasion

The atmospheric conditions were conducive for the production of severe thunderstorms with the possibility of near or full scale tornadoes. These had been forecast by the Malton Weather Office and relayed to the System Supervisor by teletype and by telephone from the Operations meteorologist in the early afternoon of June 11. The area to be affected was delineated as Warton-Barrie-Niagara to Windsor - this was further north than severe warnings usually extend; however, later action proved it correct. Since the size of a tornado is microscopic compared to the total atmosphere and even to the area of which atmosphere actually is measured by a sampling of upper air stations located 200 - 300 miles apart, it is impossible to pinpoint their future occurrence. It is possible to locate areas of unstable air; however, the pinpointing of thunderstorms and tornadoes can only be done after they form, sometimes this can be done by radar.

There is ample proof from local weather stations - one every 50 miles - that heavy thunderstorms occurred with wind gusts recorded to 50 mph. There is only indirect proof derived from the damage created, that a tornado was also involved with wind velocities much higher than those recorded.

#### Relative Forces Involved

It is normal in summer thunderstorms to have a gusty wind up to 50 mph. Forces in a tornado may reach several hundred miles per hour - since this tornado had a very narrow path and appeared to be at the bottom of the tornado scale of severity, - it is likely that the wind was in the order of 100 mph for a short period.

DKAG:ms/rp

D.K.A. Gillies  
Senior Meteorologist

cc: Mr. R.H. Hillery Mr. F.C. Lawson  
Mr. W.A. Polson Mr. W.H. Winter  
Mr. N.J. McMurtrie (2)  
Mr. J.W. Simpson



On Detroit River off Amherstburg Squal struck at 2230Z .  
OWRC ship ATOMIC anemometer reported gust to 87Kt .

PMO TRO June 13/68

Hydro Severe Weather Report 1100a - June 13/68

2330Z June 11 Three large Hydro Towers blown down vicinity Hanover  
1968.



PAISLEY  
Paisley Advocate, Ont.  
June 20, 1968

GREENOCK TOWNSHIP/HANOVER AREA

TUES JUNE 11 1968

**ELECTRIC AND WIND  
STORM DAMAGE HEAVY  
IN GREY AND BRUCE**

Riding the crest of a cold front from Michigan, a band of warm, moist air whistled through Southern Ontario Tuesday night of last week at speeds of up to 60 miles an hour.

The wind, lightning and rain it brought with it created havoc over much of the area from Windsor to Owen Sound, causing damage which ran well into the hundreds of thousands of dollars.

The storm struck Bruce and Grey Counties shortly after 6 p.m.

Hardest hit was the area about three miles northwest of Hanover. The force of the wind was so great that four hydro towers made of four-inch angle iron snapped like match sticks.

The power line leads from the Douglas Point nuclear power station to the Hanover power station, where power generated at Douglas Point enters the power grid.

Less than a mile away a 12-year-old boy and his 15-year-old sister were struck by a falling tree.

George and Linda Wilken, children of Mr. and Mrs. David Wilken of RR 1 Elmwood, escaped serious injury.

Mrs. Reuben Ernest, RR 1

Elmwood, was in the chicken pen in the barn when the storm struck.

"It got dark all of a sudden, and the next thing I knew the roof of the barn was gone," she said. A son in the stable doing chores was unhurt.

The Ernest barn was one of the largest in Brant Township. The roof of a driving shed also was wrenched off.

There were 10 calves and 22 pigs in the stable of their neighbors, Mr. and Mrs. Carl Wilken. The Wilken barn was flattened and debris was carried almost a half mile.

Both house and barn of Walter Brodhagen, RR 1 Elmwood, were damaged. All the windows in the house were broken and a section of the roof torn off.

A section of the barn roof on the farm of David Wilken also was blown away.

In Greenock Township, the barns of Morris Lippert and Harry Kroeplin were damaged. Two barns on the 8th concession of Carrick Township owned by Simon Breig and Francis Bross had the roofs ripped away.

A barn owned by Orville Seip about two miles east of Hanover had its roof lifted, as did one owned by Leonard Lang, just east of Elmwood.

At Neustadt, residents noticed a column of dust spring from

the ground in the face of high winds. Minutes later a full blown twister ripped the steel roof from the creamery. Fragments were found 60 feet away.

Across the street a pine tree was blown into the verandah of the home of Mrs. Charles Yungblut. Mrs. Yungblut, in the garden at the time, was bowled over by the force of the wind.

Cedars were uprooted, a construction shack blown over, bleachers in the ball park knocked down and the ball team dug-out, a centennial project, blown over the fence.

At Southampton a provincial police cruiser was wrecked and the officer sent to hospital in an accident blamed on the storm.

Constable Harvey Strong was taken to Wiarton Hospital with back injuries after high winds blew an approaching car into the path of the cruiser and forced the officer into the ditch. He was answering an emergency call near the Saugeen Indian Reserve.

Mrs. K. Tackaberry, Lion's Head, was taken to the Red Cross Hospital with a possible broken leg. She was injured while milking in a barn which collapsed during the storm.

Mrs. Tackaberry and her four children were inside the barn when it collapsed. Her children, aged 6 to 11, escaped with minor injuries.

The barn, one of the largest on the Bruce Peninsula, situated on Mrs. Olive Tackaberry's farm, was a total loss. Estimated damage was \$30,000, only part of which was covered by insurance. The farm is run by Mrs. Tackaberry's sons, Norman and Franklin.

Three Port Elgin area people narrowly escaped drowning as their sailboat overturned in Lake Huron during the storm.

Cottagers along the beach noticed the capsized boat about a mile from shore at 6 p.m. Names of the two men, who work at Douglas Point, and their woman companion were not learned.

John Mackay and Murray Fenton, both of Port Elgin, rescued the three persons in a small boat. They had been in the water for about a half hour. Only the woman was wearing a lifejacket. Although they were uninjured, one man was suffering from exhaustion and all were quite shaken by the ordeal. They were allowed to return to their homes.

Mr. Mackay and Mr. Fenton, both of whom live near the water, ventured out into the lake a second time to retrieve the sailboat. Mr. Mackay, taught power squadron safety course during the winter.

NEUSTADT  
BLEACHERS  
KNOCKED DOWN IN  
PART.

LIONS HEAD  
BRUCE PENINSULA

60x70  
Harry Bowern  
881-0894

Albert Gowing  
519/363-6334  
section of roof off  
LOT 26 Con 13

REUBEN ERNEST  
RR1 ELMWOOD  
BRANT TOWNSHIP

CARL WILKEN

DAVID WILKEN (519)

WALTER BRODHAGEN

GREENOCK TOWNSHIP

MORRIS LIPPERT

HARRY KROEPLIN

WALKERTON ALFRED LANG

LEONARD LANG ELMWOOD (519)

BRUCE PENINSULA

LIONS HEAD

(O LIVE) TACKABERRY (519)

(519) 364-3228

(519) 881-0153

(519) 881-0538

363-3910

364-5146

LARRY NOT REACHED INS

363

wrong number



Paper Hanover Post  
Date June 13, 1968  
Source Georgian Bay Region

JUN 20 1968

**HANOVER**

**6pm TUES JUNE 11 1968**

FRANK  
E. WILSON  
②  
③ Clipping - Storms -

# Tornado Wrecks Barns In Area, Causing Blackout

A short but violent storm passed over Hanover and district about six o'clock Tuesday, and caused thousands of dollars damage to farm buildings, businesses and hydro installations.

The damage was caused by a number of small twisters formed by the storm. One knocked over four 90 foot high hydro towers in Brant township. The towers supported high voltage transmission lines which conduct power between Douglas Point nuclear power station and the substation north of Hanover.

Power was off in Hanover for about half an hour, and for shorter periods in surrounding communities. Parts of Neustadt were without power for over two hours.

Another twister caused considerable damage to the roof of the Neustadt Creamery, lifting sheets of steel roofing and carrying them some distance from the building. One sheet was found about 250 feet away, while others piled up against a building owned by Ken Diemert across the road. There were also

pieces of wood from the rafters imbedded in the roof of Mr. Diemert's building.

One of the steel sheets was responsible for shorting hydro lines which caused the blackout. The creamery is owned by Ross Sibbett.

Many Neustadt residents watched the twister approach and saw it hit the creamery. Many trees were damaged and the railing on Mrs. Charles Yungblut's house was broken off. Mrs. Yungblut was slightly injured as she worked in her garden.

A large cedar tree, near the home of Henry Holland, was uprooted, and a tool shed owned by Elgin Lantz was destroyed.

J. C. Pattinson, manager of Walkerton district Ontario Hydro reported the roof of a large barn at Hollyrood was carried into a 44,000 volt line and was responsible for blacking out Hanover and district.

A small twister struck east of Hanover. It tore up two large trees, then demolished the roof of a barn owned by Orval Seip on highway 4. It flattened a

small shed owned by Irvin Monk before knocking over a tree which fell on some hydro poles.

Considerable damage was caused by the storm in Carrick township. On the easterly outskirts of Mildmay a barn on the property of Mr. and Mrs. Edgar Hundt was destroyed while their son, Larry, was in it. He was not injured.

Mr. and Mrs. Simon Breig on the 8th concession of Carrick reported their barn was lifted from its foundation and completely demolished, as was a straw shed.

Also on the 8th concession Mr. and Mrs. Francis Bross lost their straw shed, and one end of their barn and part of the barn roof.

About half a row of ornamental evergreen trees leading to the house of Oscar Meyer on the 8th con. were destroyed.

In Hanover several television aerials and masts were toppled. One in the south end of town, at the residence of Elmer Schmidt, crashed down on the roof of a car causing considerable damage to the vehicle.

MILD MAY EDGAR HUNDT (519) 367-5307 ✓  
SIMON BREIG (519) 367-2094 ✓  
FRANCIS BROSS (519) 367-2581 ✓  
OSCAR MEYER (519) ✓

HANOVER ORVAL SEIP (519) 364-3518 ✓



P2  
Ontario Hydro Press Clipping Service

Paper Kitchener-Waterloo Record  
Date June 12, 1968  
Source Niagara Region

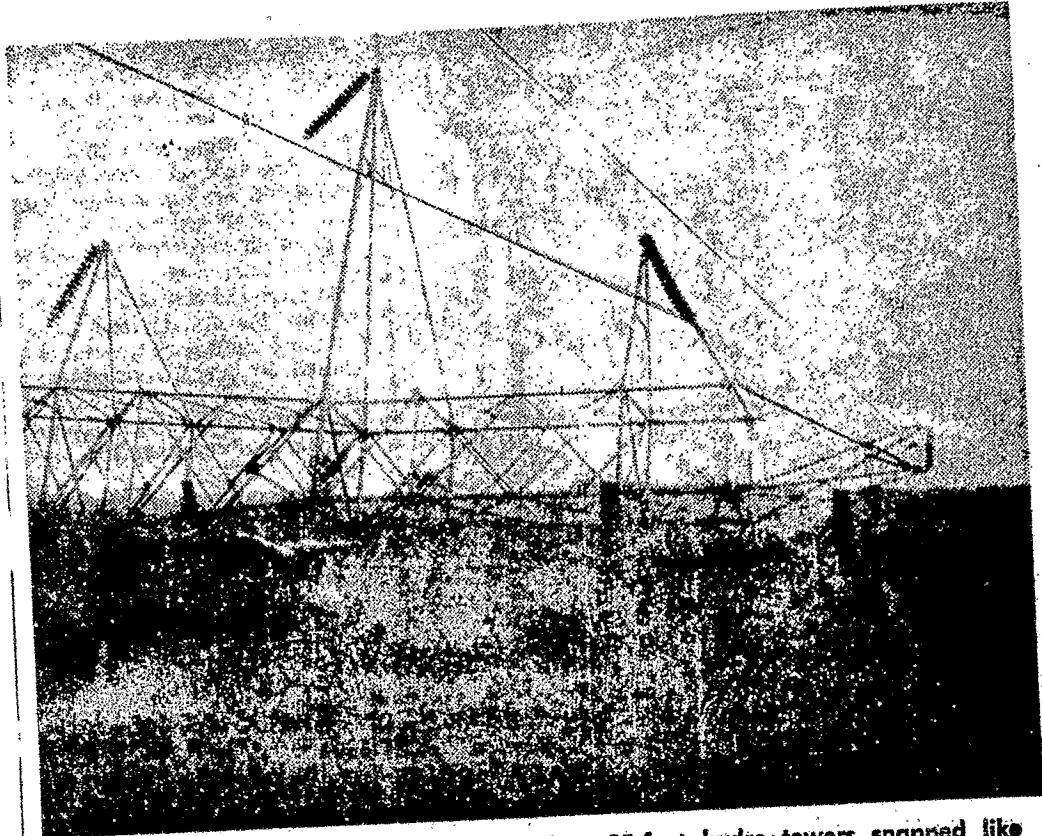
P2

7/5-3

JUN 21 1968

TUES JUNE 11 1968

N



**TOWERS TOPPLED**—Four-inch angle iron in four 85-foot hydro towers snapped like matchsticks in the face of gales which ripped through Bruce and Grey counties Tuesday night. The towers carried power from the nuclear plant at Douglas Point.

Record Photo

TORONTO WEATHER OFFICE  
POLAROID PRINTS  
C BAND RADAR PRECIPITATION PATTERNS

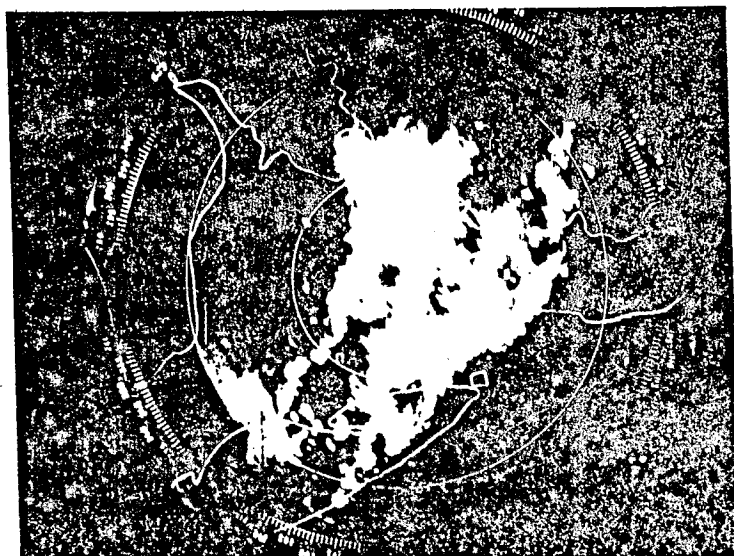
DATE: *June 11-12*  
*1968*



TIME: *11 2317Z*  
REMARKS:



TIME: *12 0005Z*  
REMARKS:



TIME: *12 0252Z*  
REMARKS:

*Time 12 0100Z*  
*Radar u/s*