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Before the
Federal Communications Commission
Washington D C 20554

SEP 13 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Petition For Rules Change

To fulfill the public need of rebroadcasting television (TV) signals into small areas of degraded TV signals.

To add to any section of the commission's rules or to create a new section, if needed, to allow readily available commercial TV equipment to be used to retransmit TV signals provided the equipment has sufficient stability to operate TV sets in a satisfactory way and with adequate reduction of spurious emissions to pass a minimum interference level.

The inherent nature of the radio waves used to transmit TV signals is to bend poorly over hills and mountains. Homeowners in irregular mountainous terrain can have widely varying TV reception as to quality of pictures or the number of locally available TV stations that can be viewed.

The concept of TV translators has evolved with their licensing in 1956 with over 5,000 in use today in this nation. Yet the character of TV waves and the cost of equipment with what is available is over powered for the needs of small areas. The Commission's rules donot limit the minimum power, but to build custom built equipment the cost would be excessive for a small areas with a few homes.

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A township, nearby to petitioner, will be detailed. It could be repeated many thousands of times in this nation.

The town of Thurman is in the southern Adirondacks of upstate New York. The nearest TV market of Albany, Schenectady and Troy, NY has it's TV transmitters at 50 or 65 miles to the south with another TV market of Burlington, VT and Plattsburgh, NY at 70 or 90 miles north or north-east.

The township is 62,080 acres with 45.13o/o owned by New York State and placed into a category of forever wild. The portion presented in the following topography maps is mostly privately owned property. Other statistics of the township are 116 miles of town or county roads with a population of 1,046 people.

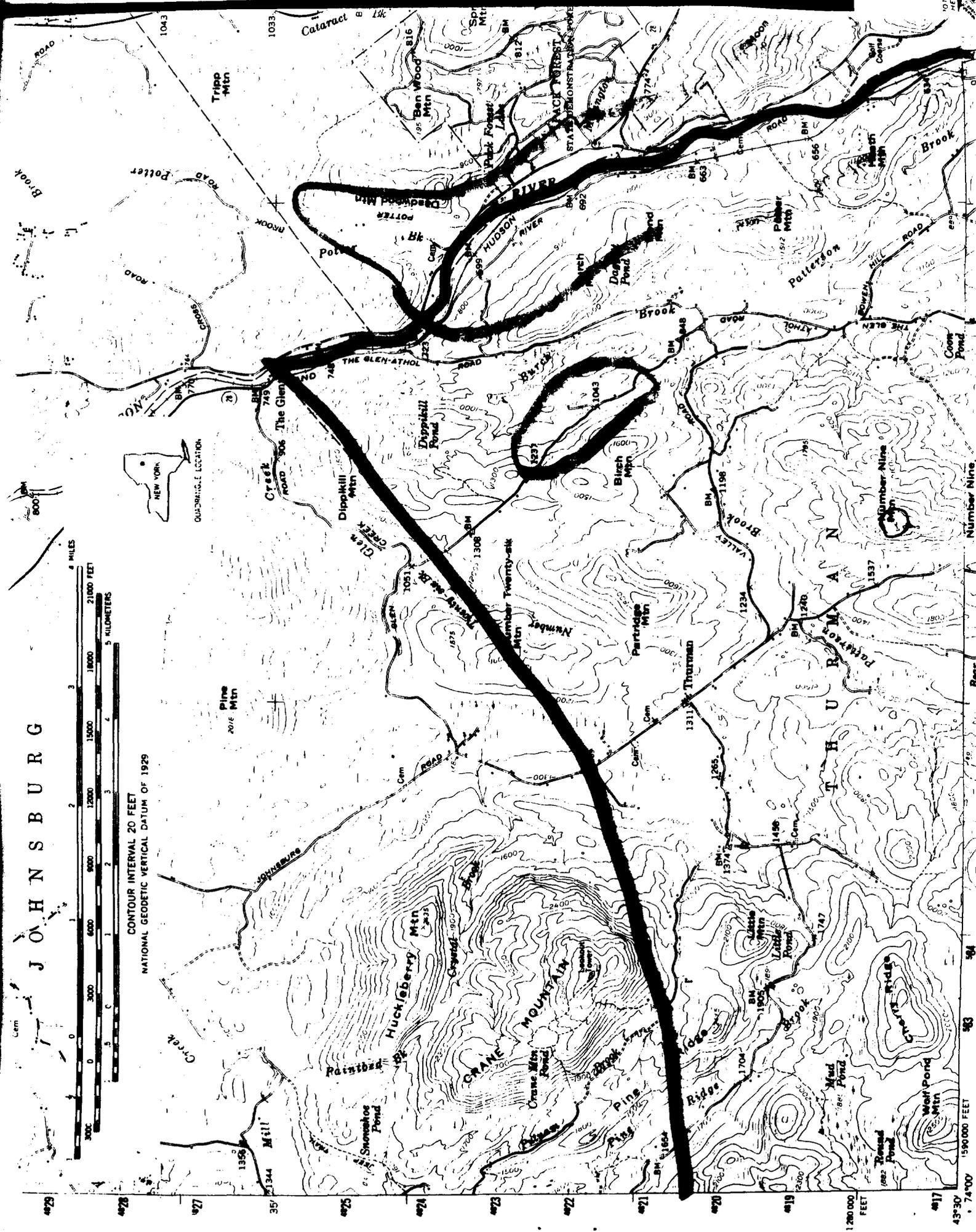
Cable TV costs of 10,000 per mile and 7 dollars per pole per year would be initially one million dollars and twenty five thousand dollars per year for pole use. This indicates cable TV would be a colossal loss. Wireless cable TV would also be stopped by the mountains. Satellite TV is available but expensive.

A description of the additions to the first topography map are:

- 1- The orange hi-lite is the town line.
- 2- Nearly centered in the town is a penned circle on number nine mountain that is over 2,100 ft. above sea level.
- 3- The yellow hi-lite is two terrain shadows and two large shadows because of the 3/4 mile long flat top of the mountain.
- 4- The red hi-lite is major shadows of over 100 ft. below line of site of the terrain of the ground.

JOHNSBURG

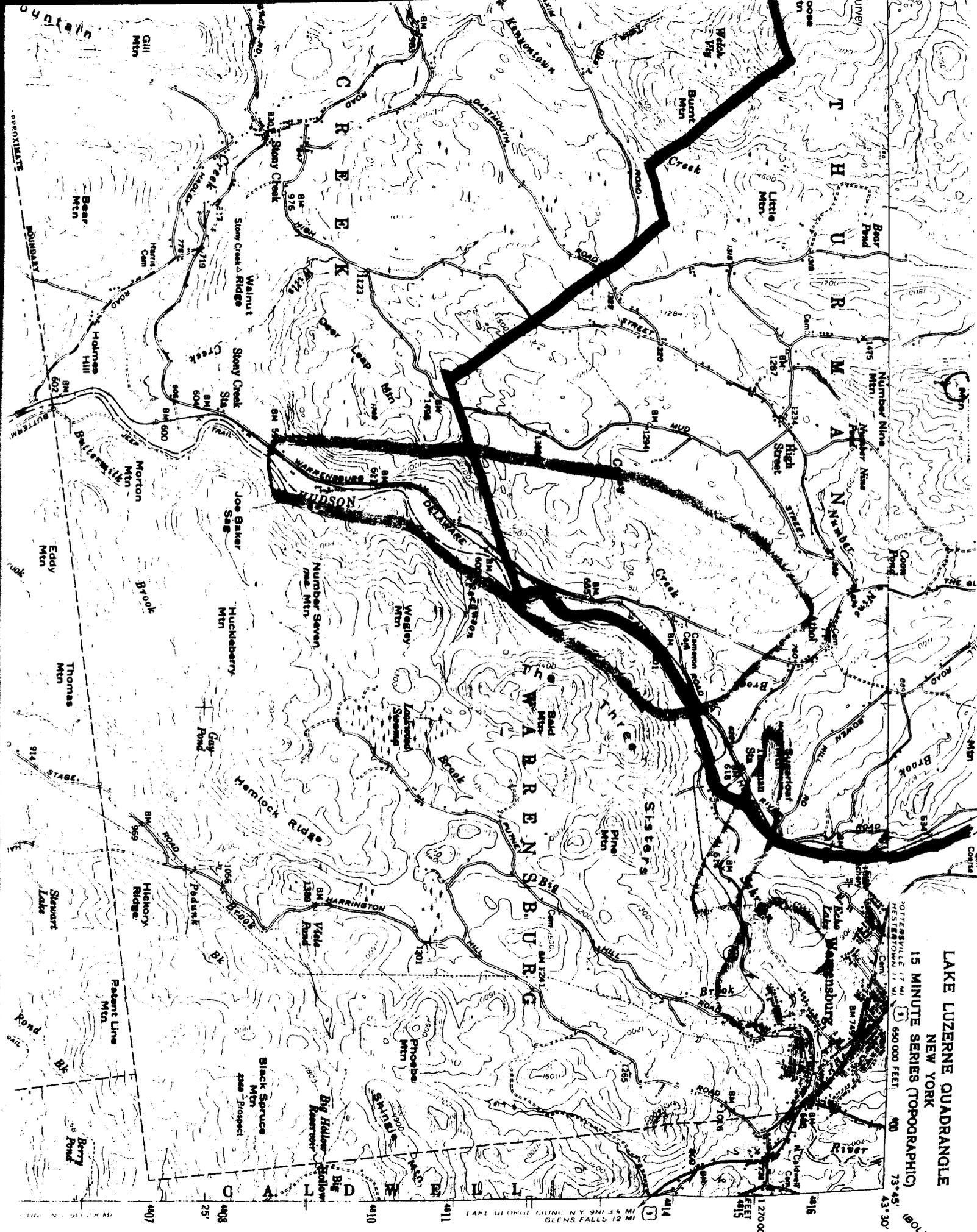
CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

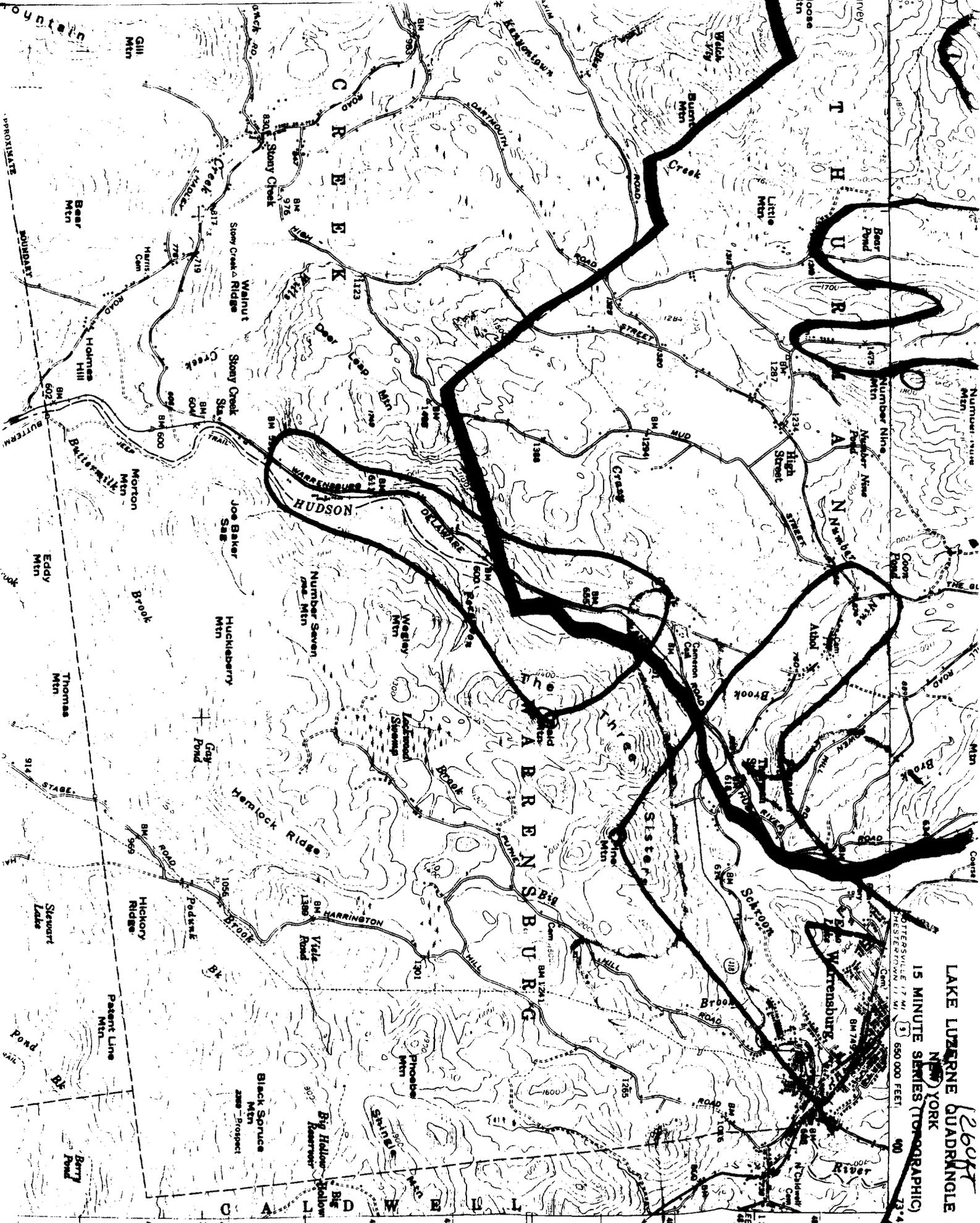


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NEW YORK

15 MINUTE SERIES (TOPOGRAPHIC)

OTTENSVILLE 17 MI. S 650 000 FEET 40° 73.45' 43.30'





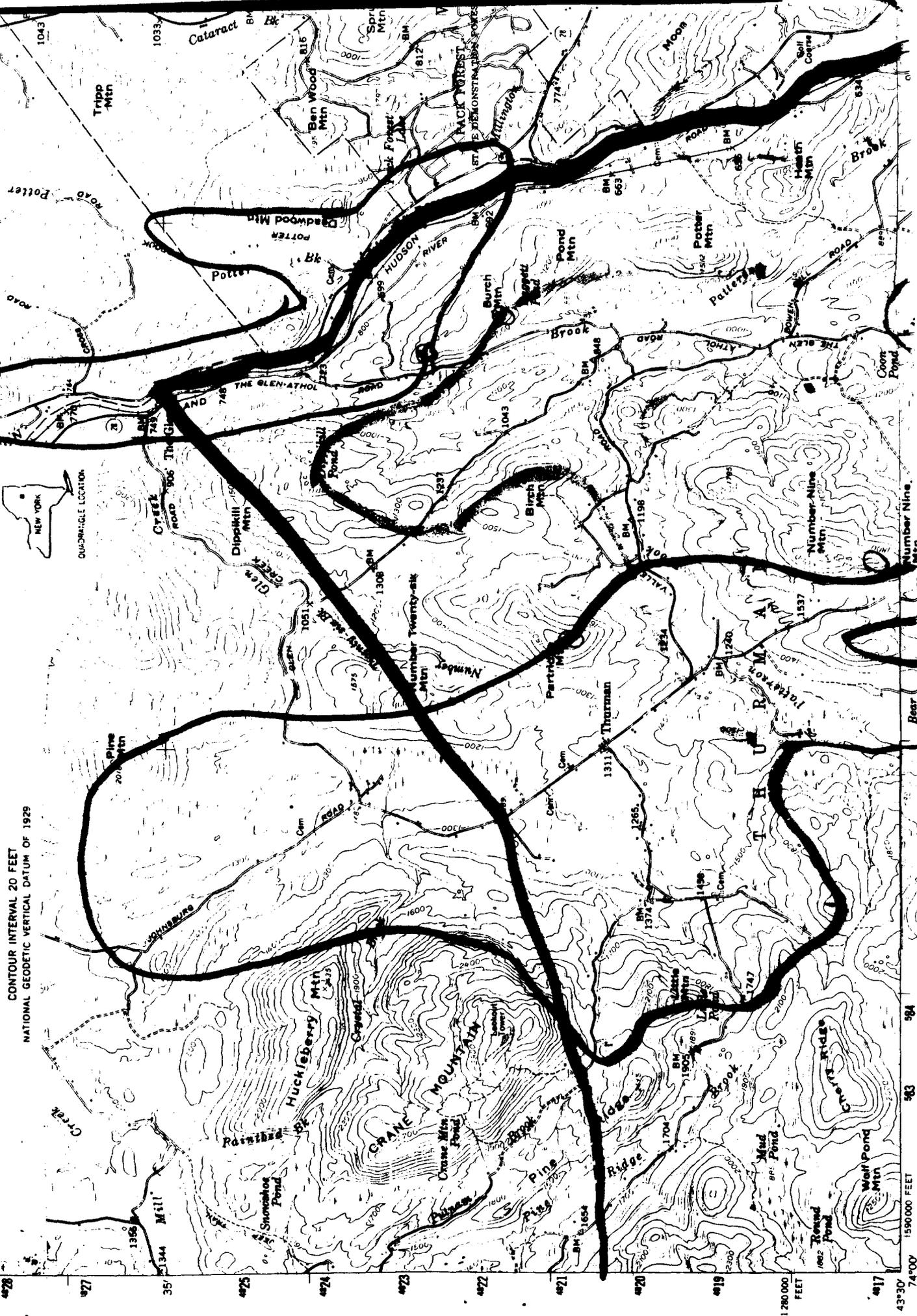
LAKE LUZERNE QUADRANGLE
 NEW YORK
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JOHNSBURG

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929



43°30' 74°00'
1,280,000 FEET
583
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The second topography map shows prospective locations for lower powered TV translators potentially 100 and 200 milliwatts of output with a range of four miles or less. The radiating antenna to be four 10 element yagi antennas or equivalent in one direction with 100 milliwatts and rotated for 180 degree or more with 200 milliwatts. These locations were selected to cover most house locations in the township and other patterns of locations could be used. The topography maps were last field checked in 1958, so more homes would be present than shown. The right side red outline is from a location at top of a mountain (1,260 ft.) north east of the village of Warrensburg. The lower left has a cross road community of Stony Creek in the township of Stony Creek is a one watt site to cover a 15 mile L shaped valley. The site is 5 miles northwest of the community of Stony Creek and is shaded by Burnt Mountain. This can also reach some homes to the east of the Hudson River.

In today's world of high technology and astronomical budgets, it seems that those people who make the rules, forget to consider the price that it will cost those who use a service. That is one point of this petition.

The rural residents of the town of Thurman are also PEOPLE OF THE UNITED STATES. Congress has given to the Commission a far reaching directive in 47 U.S.C.A. § 151 which reads "For the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, SO FAR AS POSSIBLE, to all the people of the United States a

rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges,(emphasis supplied). Another point of this petition is that there is something that can be done for these people of the United States by a change of the Commission's rules.

A less restrictive class of transmitting equipment is used in Canada called VERY LOW POWERED TELEVISION. Examining their rules several differences are noted:

1- Adjacent VHF TV channels can be used with similar equipment within 350 feet.

2- With adequate terrain shielding there is no minimum spacing.

3- When minor interference does occur there are conditions when it can be ignored.

4- No responsibility is assured that the equipment will work.

5- Instead of expensive type approval testing by the Commission it is allowed that the manufacturer can certify that the equipment will meet the requirements needed.

All of these can reduce costs such that small areas of as low as 20 to 50 homes can be economically served with satisfactory over the air TV.

Equipment that could be used in this category is manufactured by many companies. Volumes of technical specifications could be presented.

Past practices of the Commission show a tremendous reluctance to make any changes in their rules, potentially to keep from creating new problems. Low powered TV stations and TV translators are allowed to operate when no interference occurs to

television stations or any other radio service. Any troubles to be rectified or the offending transmitter must be removed.

If this category of low powered TV translators is adopted it should follow the logic that they protect the TV translators and the low powered TV stations. The name given to these in Canada is VLPTV.

If this rules change is not made then units placed into operation could result in a court action similar to that which was rendered by the US District Court of Washington, DC against the Commission in June of 1957 in favor of a small village in the state of Washington that had operating for their benefit two VHF TV on channel boosters.

Petitioner intends to place this category of transmitter into operation. There are many, many locations in this area that need this category of TV improvement in addition to those specifically detailed. The local governments cannot perform an illegal act (unless unknowingly or underhanded) such that petitioner has refrained from widely having test demonstrations of these.

People do like to see something before purchase, so that, seeing better TV at Their home TV set it is very convincing that it can be done. The general public has never heard of the concept of TV translators. This shows the further need to legally perform a simple demonstration test with an official guideline by the Commission at how and how long would be allowable.

The equipment can be easily hiked up a mountain and demonstrated for a day with modest batteries by internally connecting into the power supplies as they are generally powered from utility power. Such has been done with a STA towards a then operating astronomy radio telescope and the hassle and delay from the Commission was unreal.

In summary, the Commission's type approval rules related to TV translators prohibits their operation with commercial television amplifiers, commonly called strip amplifiers. The aspect of transmitter shut off with the parent station shut off and metering of the final stage are the major obstacles.

With changing of these rules TV signals could be economically supplied to small areas that may have only a few homes, thereby fulfilling the Congressional mandate.

For UHF , it is logical that one watt output would be the equivalent. Such a one watt UHF output TV translator has been manufactured by Television Technology Corp. but for a multiple installations for 20 to 50 homes the price is excessive. They also desire improved TV and are people of the United States.

Respectfully submitted,



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