$3^1 2$
4^5

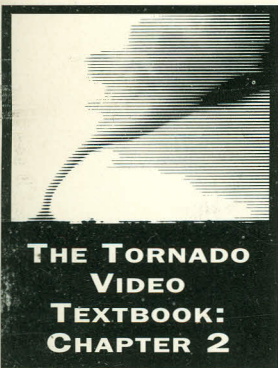*THE NATURE OF TORNADOES AND THE NATURE OF*

HUMAN BEINGS COMBINE TO MAKE SOME OF THE MOST

FUNDAMENTAL QUESTIONS UNANSWERABLE. . .

THE TORNADO VIDEO TEXTBOOK: CHAPTER 2

A Guide To:

TORNADO VIDEO CLASSICS II: THE MAGNIFICENT PUZZLE

a guide to:

Tornado Video Classics-II

....the Magnificent Puzzle

written by Thomas P. Grazulis

1. INTRODUCTION

The theme of the video and guide for *Tornado Video Classics-II* is tornado "risk" and tornado climatology....the seemingly unsolvable puzzle of where, when, how often, and with what intensity tornadoes have and will strike. The various parts of this video and guide are designed to enhance your understanding of the risk from tornadoes, and how it is studied. No mention of actual risk values or analysis techniques are mentioned in the video itself. The reason for this is to keep the video from being immediately outdated. Printed guides can be easily updated for technique and statistics. A video production cannot.

TVC-II explores risk in seven ways:

A.) From 00:00 to 23:07, the first 19 video segments show situations with immediate risk to life, with little or no narration.

B.) From 23:08 to 26:51 the video asks questions about the comparative risk from one state to another. These questions can only be answered by attempting to somehow quantifying risk, place a number on it.

C.) From 26:52 to 46:11 we look at a widely used tool for quantifying risk... the Fujita Scale of Tornado Intensity. Since not all tornadoes are created equally, the Fujita Scale gives us a starting point for discussing the risk from tornadoes with a variety of maximum wind speeds.

D.) From 46:12 to 56:27 we look briefly at the career of the single person who has contributed the most to our understanding of tornado risk, Professor Ted Fujita of the University of Chicago. The guide uses many figures to highlight his career. Most of these figures are in section three. Others are interspersed with the tornado descriptions in section two. If 4,000 pages were available, it would be quite easy to fill them with the writings, drawings, calculations, contributions, and concepts of Tetsuya T. Fujita, and his students.

E.) After a one-minute-long closing statement, the video from 57:32 to 1:27:47 (including the credits), looks at the rather "risky" pursuit know as storm chasing...but with a minimum of "hype."

F.) From 1:27:49 to 1:56:50 we look at one of the efforts of the Weather Service to reduce risk (between the years 1956 to the mid-1970's) through public education. The cases in point are the two films entitled "Tornado!." Both contains bits of what is now considered to be bad advice. That advice may have been somewhat counterproductive to the risk reduction effort.

G.) The glossary is based on "A Comprehensive Glossary of Weather Terms for Storm Spotters," developed by Mike Branick of the NWS Southern Region office in Fort Worth, TX. It will be the starting point for an even more complete glossary and photographic atlas for storm spotters in the future. The users of this glossary will hopefully better understand what they hear and read, and can help to reduce the immediate risk to life for their community.

The purpose of this tape and guide is simply to introduce the various aspects of tornado risk. The purpose is not an effort to directly reduce the risk to life. The risk of a deadly encounter with a tornado is so small, that reducing it any further with a project as minor as this one is unlikely.

THE "MAGNIFICENT" PUZZLE

Before any discussion of risk, the author wishes to add a personal about the subtitle of this video..... "The Magnificent Puzzle." The use of the word "magnificent" as the adjective of choice was done by a process of elimination. I began by searching for every positive adjective in the English language: extraordinary, remarkable, incredible, awesome, amazing, fantastic, phenomenal, spectacular, splendid, wondrous, astounding, overwhelming, overpowering, breathtaking, inspiring, uncontrollable, baffling, bewildering, and impressive were among the other adjectives that were considered for the subtitles. It is possible that residents of Plainfield, IL and Andover, KS may very well have begun the search for adjectives with such words as hellish, horrible, horrendous and catastrophic, but that's not how the author views the subject.

It's not just the event itself that the author finds so intriguing....its the puzzle. The puzzle consists of numbers and patterns created by this baffling mix of violent order (the tornado) that is spawned from the chaos of a thunderstorm, both of which interact with the bewildering complexities of human nature. The hope is that in the seemingly random array of tornado tracks there are hidden clues to the nature of the beast, and that the study of those tracks will eventually add a small piece of insight to what is a magnificently challenging puzzle.