

A COMPARISON BETWEEN TELEVISION NEWS
DIRECTORS' EXPERIENCE WITH
SATELLITE NEWS VEHICLES
AND THEIR ATTITUDES
TOWARD SATELLITE
NEWS VEHICLES
IN OKLAHOMA

By

REX MOORE KULLMANN II

Bachelor of Arts

Oklahoma State University

Stillwater, Oklahoma

1985

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
December, 1987

Thesis
1987
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Thesis Approved:

William J. Rugg
Thesis Adviser

Maureen J. Nemecek

Philip E. Paulin

Norman N. Durham
Dean of the Graduate College

1290987

PREFACE

Whenever a new technology is applied to news gathering, it reshapes, subtly or radically, the make-up of the news we see each night. At the inception of such a transition, there is always a time when the nature of the change is in doubt. In a way, this thesis portends the future of satellite news gathering by gauging its perceived value to those who know it most intimately: news directors.

I am grateful to many who have helped me during my term of graduate study. First and foremost, I am grateful to my thesis adviser Dr. William Rugg. I relied heavily on his patience and support. I am also grateful to Dr. Maureen Nemecek and Dr. Philip Paulin for serving on my thesis committee.

Special thanks go to Lisa John for providing me with several SNG articles and invaluable insights I used to make the questionnaire accessible to news directors. Thanks also go to the late Dr. Walter Ward for the research training I received. I also gratefully acknowledge the research advice I received from Dr. Charles Fleming who is not a substitute but another original.

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CHAPTER I

INTRODUCTION

Satellite news gathering (SNG) is a new technology being employed in television news today. It began in 1984 through the combination of two existing technologies: communication satellites and electronic news gathering.¹ The technology up to that point allowed live remote broadcasts through the use of portable electronic cameras and microwave equipped trucks. While this was a great improvement over film (which was used previously) problems still remained. Microwave transmission only allows signals to be sent a maximum of 50 miles. Furthermore, there had to be a clear line-of-sight between the transmitting truck and the station. This created a frustrating situation for news broadcasters who could not do live remotes from urban areas where tall buildings blocked the line-of-sight signal path or from towns more than 50 miles away without arranging for complicated and expensive multiple signal relays.

Satellite communications suffer from none of the problems that microwave transmission does. At the time of the inception of SNG, however, few television stations were

¹Alex Zavistovich, "SNV Growth, Future Examined," TV Technology, July 1987, p. 11.

equipped with the necessary satellite dishes and receivers. In 1984 and 1985 NBC began equipping its affiliates with satellite dishes to be used in receiving network feeds. The NBC Satellite Network, as it was called, was originally meant to be a replacement for the AT&T terrestrial lines that the network had been using to distribute programming to its affiliates.² Once the satellite gear was installed, however, it became clear that this equipment could be used to receive any satellite signal that the affiliates wished, not just network feeds. These stations now had the necessary downlink facilities to perform satellite news gathering reception. What they lacked to do complete satellite news gathering was a portable uplink.

Hubcom, a division of Hubbard Communications, provided a portable uplink in the way of a Ford truck with a 2.3 meter dish mounted on it. Introduced at the 1984 National Association of Broadcasters Convention, it was the first portable uplink specifically designed for satellite news gathering.³

Stations with this technology could broadcast live stories from anywhere on the continent without regard for the local terrain or the distance to the receiving station. Stations could, for the first time, cover national and even international stories live without prohibitively cumbersome terrestrial lines or microwave links. SNG also allows

²Ibid.

³Ibid.

stations to broadcast regional, live reports from towns outside the 50 mile limit that microwave transmission imposes. "If you can drive, fly, or sail there, you can get the story. In a nutshell that's the significance of. . . satellite news gathering."⁴

Statement of the Problem

While satellite news gathering has great potential for live local news, there is no clear consensus as to whether this technology will actually become an important part of local television news or not. Comments in the relevant literature differ greatly. "Before the end of this decade, the majority of the TV stations will be operating portable satellite uplinks because they're such an asset."⁵ This is not an unusual comment, yet there are differing opinions:

Unfortunately, many local stations, believing the predictions, are paying huge bucks to get into the satellite sweepstakes only to find they have an elephant in their parking lot that eats, doesn't perform much and doesn't bring anyone into the tent.⁶

Furthermore, a station's use of SNG equipment depends greatly on the location of the station. Factors such as market size, local terrain and the competition all play a

⁴Phillip Kurz, "Extending the Reach of Your News Coverage: A Down-to-Earth Look at SNG," Television/Broadcast Communications, July 1985, p. 36.

⁵Kim Standish, "Satellite News Gathering: The Next Round," RTNDA Communicator, September 1986, pp. 37.

⁶Gary Cummings, "The Elephant in the Parking Lot," Washington Journalism Review, January/February 1987, p. 46.

part in a given station's use of SNG equipment. Therefore, the importance of SNG may vary from state to state.

The literature concerning SNG reveals that satellite news vehicles (SNVs) have two main uses. Aside from the obvious use as a news gathering tool, SNVs can be valuable tools for promotion or enhancement of the station's image. Journalist Mike Clary reports:

The trucks are tools indeed, but not always for journalism. SNG is, in the words of one station manager, 'highly promotable.' . . . At KRON, news director Ferring reports that his station developed a one-upmanship theme, something like this: 'They got a seismograph, we got a seismograph; they got haircuts, we got haircuts; we got a satellite truck, but they didn't.'⁷

While Oklahoma stations are beginning to use this expensive technology, there has been no study to find out what value, if any, Oklahoma television news directors find in this technology. Furthermore, since the technology is so new, not all television news directors have experience with it. A study to determine the attitude Oklahoma television news directors have concerning satellite news vehicles should also measure their experience with SNVs. This could then determine whether news directors with little or no experience with SNVs have a different attitude towards them than news directors who use the technology on an almost daily basis.

⁷Mike Clary, "Live From Anywhere." Channels, Summer 1986, p. 65.

Purpose of the Study

The purpose of this study is to determine the attitude Oklahoma television news directors have towards satellite news vehicles and the experience on which they base their opinions. This study should be of importance to Oklahoma television station owners and managers who must determine whether or not to invest in this very expensive technology. This study should also be of value to educators of broadcast journalism, especially those in Oklahoma. If SNVs grow in importance as a news gathering tool, then broadcast educators should, logically, place more emphasis on live reporting, remote broadcasting and knowledge of satellite transmission procedures.

At the time of this research, only two Oklahoma City stations, KWTW and KTVY, and one Tulsa station, KJRH, own portable uplink equipment, while KOCO in Oklahoma City and two network affiliated Tulsa stations, KOTV and KTUL, rent portable uplinks for news gathering occasionally. The smaller market television stations in Oklahoma have never used satellite news vehicles, to date.

The independent variable in this study will be the experience Oklahoma television news directors have with satellite news vehicles. Since some of the stations use a satellite news vehicle even though they do not own one, this will be measured as a frequency, by asking news directors how often they use an SNV.

There will be two dependent variables. The first will be the attitude news directors have toward SNVs as a news gathering tool. The second will be news directors' attitudes toward SNVs as a promotional tool. These will be measured along a nine point Likert scale.

This study will seek to determine the relationship (if any) between Oklahoma news directors' experience with satellite news vehicles and their attitude towards it as a news gathering tool as well as a promotional tool.

Definition of Terms

The following terms are used to describe the way in which news is gathered. Specifically, these terms describe the means by which news material is recorded or transmitted back to the station.

Area of Dominant Influence (ADI)

An ADI is a collection of counties:

. . . in which the home market stations receive a preponderance of viewing, and every county in the continental U.S. is allocated exclusively to one ADI--there is no overlap.^a

There are currently 213 ADI markets.^a

^a"Television Marketplace," Broadcasting/Cablecasting Yearbook, 1986 (Washington, D.C.: Broadcasting Publications, 1986), p. C-144.

^aIbid.

Communication Satellite

Satellites specifically intended to relay communication signals including audio signals, video signals, and data. These satellites are parked in geosynchronous orbit 22,300 miles above the Earth's equator. In this orbit the satellite revolves around the Earth at the same rate that the Earth rotates. This makes the satellite appear stationary from the Earth's surface.

Transponder

A device found on communication satellites that receives and retransmits communications signals.

Electronic News Gathering (ENG)

Acquiring news material using portable video cameras and video cassette recorders instead of a film camera. Electronic news gathering greatly reduces the time it takes to prepare a story for air and when combined with a microwave truck or satellite news truck, live remotes are possible.

Satellite News Gathering (SNG)

News material is sent from a remote location up to a satellite, then down to the station where it can be broadcast or recorded for later use. This allows news material to be sent to the station from anywhere on the North American continent.

Satellite News Vehicle (SNV)

A self-contained truck or van equipped with cameras, a satellite dish and associated electronics that allow images and sound to be recorded and/or relayed live to a communications satellite. These vehicles differ from other portable satellite uplinks in that they are smaller, quicker to setup and are specifically designed for news gathering.

Remote Broadcast

A live broadcast originating from somewhere other than the television studio.

Uplink

A satellite dish and associated electronics used to transmit signals up to a communications satellite. In a typical satellite news gathering situation, the satellite news vehicle is equipped with an uplink. This word is also used as a verb to describe the act of sending a signal to a communications satellite.

Downlink

A satellite dish and associated electronics used to receive signals from a communications satellite. In a typical satellite news gathering situation, the station has a downlink dish. This word is also used as a verb to describe the act of receiving a signal from a satellite.

Limitations of the Study

This study will be limited to network affiliated television stations in the State of Oklahoma. There are currently only eight. They are: KOCO-TV, KTVY-TV and KWTV in Oklahoma City; KJRH-TV, KOTV, and KTUL-TV in Tulsa; KTEN-TV in Ada and KSWO-TV in Lawton. Independent stations, public stations and low power TV stations are not included because they do little or no local news and are not affiliated with any of the three national television networks. As mentioned earlier, the need and usefulness of satellite news gathering is partially determined by the location of the station, therefore, results of this study may or may not apply outside of Oklahoma.

CHAPTER II

REVIEW OF LITERATURE

Since satellite news gathering (SNG) is such a new phenomenon, relevant literature is scarce. All the material currently being written about the subject is found almost exclusively in journals and periodicals. Journals in the field of broadcasting and television journalism have, however, devoted much space to satellite news gathering.

SNV Capabilities

As is often the case when a new technology develops, much of the material being written is enthusiastic praise for the expanded capabilities the news technology promises. Satellite news gathering is no exception. One of the purported great new capabilities SNVs provide is an unlimited range of live news coverage. One South Carolina news director says that his station's satellite news vehicle allows him to:

. . . provide faster and better coverage outside our metropolitan area in a more timely way. It has enabled us to do things we would never have been able to do before locally . . . [The station] can get there much faster, can stay longer and

cover events more thoroughly. We don't have to leave in order to get back to the station.¹

Satellite news vehicles (SNVs) allow stations to report live from anywhere you can "drive, fly or sail."² They also allow live reports from nearby areas where live transmission would otherwise be blocked by the local terrain. This capability is especially important to stations that are surrounded by hills, mountains or tall buildings that block regular microwave transmission. One Florida news director reports, "It's easier to set up a satellite truck feed from anywhere in the world than it is to get a simple microwave shot from downtown Orlando to our station six blocks away."³

The technology that makes SNG possible is not new. Satellites have been able to transmit video signals since NASA launched SYNCOM I in 1963.⁴ There are, however, new refinements that make this technology practical for use in news gathering. One of these is the Ku frequency band.

Ku-band satellite transmission is fast replacing C-band transmission. The Ku-band is a much higher frequency band that does not interfere with terrestrial microwave transmissions. Because of this, Ku-band transmission does

¹"Extending a Station's Reach a Little Farther," Broadcasting, 14 July 1987, p. 44.

²Phillip Kurz, "Extending the Reach of Your News Coverage: A Down-to-Earth Look at SNG," Television/Broadcast Communications, July 1985, p. 36.

³Alex Zavistovich, "TV Stations Critique SNV Use," TV Technology, August 1987, p. 9.

⁴Loy Singleton, Telecommunications in the Information Age (Cambridge: Ballinger, 1983), p. 78.

not require clearance from the Federal Communications Commission for each transmission the way C-band transmission does.⁵ Ku-band transmission does present one concern. As the President of Dalsat, a satellite truck manufacturer, explains:

Ku-band has a specific feature that differentiates it from C-band in that Ku-band fades in heavy rain. The signal wavelengths are shorter, and as a result, they are attenuated by rain.⁶

Rain attenuation can be overcome by using large dishes or higher power amplifiers. Bud Henley of Hubcom claims, ". . . there has yet to be second of outage due to rain attenuation."⁷

Another technical advance that has helped SNG growth has been two-degree spacing. The FCC's announced requirements for two-degree spacing means that satellites in orbit around the Earth can now be placed two degrees apart instead of the previous four degrees apart. This allows for more satellites to be placed in orbit and, consequently, more communications traffic to be handled. There was a concern that two-degree spacing would affect the quality of signal distribution by increasing interference. Antennas to be used as uplinks must meet special requirements for two-degree spacing. The concern was that some of the antennas would not meet these requirements once they were mounted on

⁵Kurz.

⁶Ibid., p. 38.

⁷Ibid.

a vehicle.⁶ These problems should now be solved. As of January 1, 1987, it is a violation of the law to operate an uplink that does not meet the FCC's requirements for two-degree spacing.⁹

Other problems with satellite news gathering have to do less with the technology itself than with the way the technology is used. One of these is the grid lock problem that occurs when there are not enough satellite transponders for the traffic at any given time. One member of Comsat General, a satellite vehicle manufacturer, explains it this way, "Everybody who's in the news business wants to be on the air and wants to be live, and they all want it between the hours of five and six o'clock."¹⁰ The solution proposed for this problem is half-transponder operation which allows two programs to be simultaneously sent on a single satellite transponder.¹¹

Another problem in using live satellite uplinks is that the scheduling for transponder time tends to be inflexible. If a local newscast goes off schedule due to a late breaking lead story or unforeseen events, the five minute "window" of prearranged transponder time will no longer fall correctly

⁶Phillip Kurz, "SNG Gains Momentum," Television Broadcast, November, 1985, p. 66.

⁹Ibid., p. 68.

¹⁰Ibid., p.72.

¹¹Ray Benedict, "Everything You Always Wanted To Know About SNG But Didn't Know to Ask," Television Broadcast, July 1986, p. 65.

into the newscast schedule. The chief cameraman at a Massachusetts television station explains what a news director's options might be in such a situation:

Either go with the satellite as scheduled, play the breaking story second and to hell with the competition, or, lead with the news and pray that you can extend the 'window.' The savvy producer will probably choose the second option and hedge her/his bets by asking the reporter to feed a sign-off as soon as the bird is up. With the body of the report already in house, the hastily pretaped close allows a graceful solution to the problem of a window which ends 1:30 before the story is over.¹²

Cost

Perhaps the largest problem facing the growth of the satellite news vehicle industry is the cost. The cost of owning and maintaining a satellite news vehicle is too high for all but the largest markets. According to one National Association of Broadcasters survey, the average cost of the satellite news vehicles now on the road is \$440,000.¹³ The cost for maintaining and operating the vehicles is \$75,000 to \$150,000 yearly.¹⁴ That includes satellite transponder time at \$20 per minute.¹⁵

¹²John Premack, "Straight From the Shoulder," RTNDA Communicator, September 1987, p. 84.

¹³"NAB SNV Survey Finds More on Way," Broadcasting, 6 April 1987, p. 72.

¹⁴Gary Cummings, "The Elephant in the Parking Lot," Washington Journalism Review, January/February 1987, p. 46.

¹⁵Mike Clary, "Live From Anywhere," Channels, Summer 1986, pp. 65.

The high cost of purchasing a satellite news gathering vehicle is usually off-set to some extent by the networks. ABC, CBS and NBC all offer plans to reimburse their affiliates up to one-half the cost of a satellite news gathering vehicle. NBC, for example, will reimburse affiliates up to \$150,000 towards the purchase of a vehicle and offers a five-year cost sharing plan if affiliates meet certain requirements. These requirements have to do with the technical specifications of the antenna.¹⁶ While the affiliates are under no contractual obligation to use the truck for network purposes, the network will expect "a cooperative spirit" when a member station covers a late breaking national story.¹⁷

There is a concern that owning such an expensive piece of equipment will force its overuse. One San Francisco news director says:

We do spend a lot of time sitting around trying to figure out how to make use of this thing. We've got this very expensive piece of equipment out there we would like to make use of. But we can't just go out to cover the flowers growing.¹⁸

This kind of pressure can have a damaging effect on local news content. The concern is that stations will use the truck more for station promotion than for news coverage of important events. One researcher says:

¹⁶"Networks All On Satellite News Gathering Bandwagon," Broadcasting, 14 July 1986, p. 49.

¹⁷Ibid.

¹⁸Clary, p. 64.

Frankly we're concerned that some stations can be distracted from the basics of good journalism. Years ago the razzle-dazzle was enough. But getting the news is what's important now.¹⁹

Satellite News Gathering Operators

While owning a satellite news gathering truck may hold potential for harming the quality of local news, it also offers great potential for improving the quality of local news. This potential lies with the satellite news gathering operators.

Satellite news gathering operators are news exchange networks for stations that own their own satellite news gathering vehicles. There are now ten satellite news gathering operations.²⁰ Conus is the best known.

Conus is an acronym for "Continental U.S."²¹ It is a distribution network built of individual member stations, each of which owns a satellite news gathering vehicle. For an average yearly subscriber fee of \$20,000 to \$30,000 (actual fees depend upon market size),²² a member station can have access to any stories that may be generated and uplinked by any of the other member stations. In exchange,

¹⁹Ibid., p. 66.

²⁰Cheryl Carpinello, "Satellite Newsgathering Operators," Via Satellite, September 1987, p. 37.

²¹Robert Bork Jr., "Conus the Barbarian," Forbes, 4 November 1985, p. 111.

²²Carpinello.

each member station is expected to lend its services to the network when a national story breaks near that station.

Conus Communications is a consortium operated by Stanley Hubbard who is also the president of Hubbard Broadcasting in Minneapolis-St. Paul and Hubcom, a satellite news gathering truck manufacturer. Material for the service is provided entirely by the member stations. Conus provides the satellite time via four transponders on the RCA K-2 communications satellite that it has leased for a six year period for \$73 million.²³ Conus schedules access times for all member stations and arranges voice communications between the uplink sites. This allows Conus to do what only the networks had previously been able to do--access a large number of stations simultaneously.²⁴

Conus and the other satellite news operators have become important sources of national news material for local stations. National news material was previously available through the networks, but affiliates were often unsatisfied with the material they were sent. The managing editor of an ABC affiliate explains, "[ABC] wasn't meeting our needs in getting material to us from across the country that was of particular interest to our viewers."²⁵ Journalism professor

²³Bork.

²⁴Ibid.

²⁵Alex Zavistovich, "TV Stations Critique SNV Use," TV Technology, August 1987, p. 9.

William Drummond explains the growth of satellite news operators this way:

A decade ago, such news services would not have been able to support themselves. Back then, most local news shows broadcast by network affiliates lasted either thirty minutes or an hour. Each afternoon, as a service to their affiliates, the network news divisions would distribute raw video of that day's top national or international stories, often saving the best pictures for their own evening news shows. If a local station wanted to run a national or international story, most were satisfied to fashion the network-supplied footage into a short piece narrated by the station anchor. But as local news broadcasts became the station's chief source of revenue, expanding to two hours or even two and a half hours daily, the need for inexpensive, well-produced news stories grew rapidly.²⁶

Local newscasts are not only longer, they cover more national and international stories. WFAA in Dallas runs a mix of approximately 40 percent national and international stories compared to approximately 25 percent a few years ago.²⁷ A news anchor in Sacramento says one reason his station is covering more international stories is that "the local viewer identifies more with us than with Brokaw or Rather."²⁸

²⁶William Drummond, "Is Time Running Out for Network News?" Columbia Journalism Review, May/June 1986, p. 51.

²⁷A. Sanoff, D. Kalb, and M. Kimmelman, "The Long Arm of Local News," U.S. News & World Report, 16 March 1987, p. 54.

²⁸Phillip Kurz, "ENG: Going the Extra Miles for Service, Profits, and Ratings," Television/Broadcast Communications, November 1984, p. 48.

Affiliate Independence

The increased capability and appetite that the affiliates have for national and international news has changed the relationship they have with the networks. Initially, the networks feared that local stations would completely replace network national newscasts with their own national newscasts. To quote one California news director:

If the general manager came to me and said, 'Bob, I'll give you ten million dollars next year and we're going to drop NBC Nightly News. Can we and should we?' I'd say yes to both questions.²⁹

Stanley Hubbard says Conus stations can cover national stories better than the networks since they are spread throughout the country and not centered in New York or Washington like the networks.³⁰ Hubbard claims this allows Conus to react more quickly to late breaking stories. Hubbard cites as an example WBRZ-TV in Baton Rouge, which was covering an oil rig accident and uplinking live to all Conus member stations while the networks were "scrambling around trying to figure out what to do."³¹

Not everyone agrees that individual stations and satellite networks can replace network news programs. None of the news directors in attendance at the 1987 National Association of Broadcasters convention thought that network

²⁹Drummond.

³⁰"Hubbard Shares His Conus Vision," Broadcasting, 3 February 1986, p. 54.

³¹Ibid.

news operations would be displaced. One news director said "We have no interest or intention of turning newscasts into a substitute for what ABC does."³²

Effect on Network News

The networks' fear that their news programs might be displaced has spurred them to improve their newscasts in order to differentiate themselves from local newscasts. Ironically, the networks are doing this by using the same technology that is now available to the affiliates. Portable satellite equipment allows network news shops to provide more in-depth reports from remote locations. NBC News President Lawrence Grossman said:

We have an incredible capacity to originate where anything is happening, so we can move around, originating out of places like a garden in Tokyo. We can make international stories more meaningful--the Philippine revolution was as meaningful [to American viewers] as if it happened in Chicago.³³

Journalist Richard Zoglin explains:

The urge to travel is not likely to go away. The networks are faced with growing competition, not only from one another but from aggressive local stations and independent news services. Showcasing the anchor in remote locations is one way for a network to demonstrate its uniqueness.³⁴

³²"Satellite Newsgathering: Growing Presence at NAB," Broadcasting, 6 April 1987, p. 71.

³³"Satellites Giving Networks Greater News Freedom," Broadcasting, 14 July 1987, p. 42.

³⁴Richard Zoglin, "Everywhere but in Manila," Time, 10 March 1986, p. 61.

Network news is also distinguishing itself from local news by doing fewer stories and covering each one with more depth. NBC, for example, has expanded its once weekly feature called "Special Segments" into a five-minute daily item.³⁵

Promotional Value

One reason for a station to purchase a satellite news vehicle is to promote the image of the station. One major concern for many news directors is that they will find themselves without a satellite truck when the local competition gets one. A Miami news director said:

If your competition is doing a live shot from a remote location that is critical to your market and you can't do it because you don't have the technical facilities, you're in the Dinosaur Age. Who is going to pay attention to you when people realize they're not getting the story?³⁶

Although owning a satellite news truck is undoubtedly good for a given station's image as a high tech news gatherer, it is questionable whether the truck itself will bring higher ratings. While some stations report a slight increase in their ratings, most do not. One satellite coordinator in Omaha maintains that his station's ratings have not changed since they have added a satellite truck even though they are the only station in town to have a

³⁵Jonathan Alter, "Anchors Away: At Home on the Farm," Newsweek, 10 March 1986, p. 67.

³⁶Kim Standish, "Satellite News Gathering: The Next Round," RTNDA Communicator, September 1986, p. 38.

truck.³⁷ A vice president of Midwest Communications agrees, "It's not going to improve ratings. It's a matter of image in the market."³⁸

Summary

The capabilities of satellite news gathering equipment are immense. These immense capabilities allow news directors a wide latitude in deciding how to best use the equipment. Although there has been one survey done to determine news directors' attitudes towards satellite news gathering technology, the survey included only the top fifty markets.³⁹ Much of the other literature available offers conflicting viewpoints from news directors. While some news directors see satellite news gathering as a way to improve their regional coverage, others see it as a way for local stations to displace network news.

While most news directors agree that owning a satellite news gathering vehicle is good for a station's image, there is disagreement as to how it affects the station's ratings.

It is clear from the literature that satellite news gathering is here to stay. Intense competition has made it so. But it is not clear exactly how it will be used.

³⁷Zavistovich.

³⁸Standish., p. 39.

³⁹John Broholm, "SNG Research," RTNDA Communicator, November 1985, p. 26.

CHAPTER III

METHODOLOGY

The purpose of this study is to determine how television news directors of network affiliated stations in Oklahoma view satellite news gathering technology. Initially the question of how Oklahoma television stations use satellite news gathering technology was to be measured by a content analysis study of television news programs in Oklahoma to determine how individual stations were using this technology. This concept was later abandoned when it was discovered that no reliable record of news content exists for the stations before they began using satellite news gathering equipment. Without a basis for comparison, it would be impossible to tell whether satellite news gathering had made a difference in the content of Oklahoma news programs or not. Likewise, a comparison of news content between stations that use satellite news gathering and those that do not would be meaningless without knowing how they compared before the satellite news gathering equipped stations began using SNG.

Parameters of the Study

Since a content analysis was not possible, the logical next step was to ask television stations how they view this technology. The relevant literature suggests that portable satellite uplinks are valuable tools both for news gathering and for station promotion. It seems appropriate, therefore, to ask the stations how they view this technology as a tool in both of these areas.

Furthermore, the literature shows that the need for satellite news gathering technology varies widely in different locations. Oklahoma broadcasters may perceive satellite news gathering differently than broadcasters in other states. For this reason, this study will be limited to stations in Oklahoma.

The relevant literature also shows that network affiliate stations are the most likely purchasers of satellite news gathering trucks. They have financial assistance in the form of network subsidies that allows them to afford this very expensive technology. Also, the independent (non-network affiliated) stations in Oklahoma do not produce major local newscasts. It is logical then to limit this study to network affiliated stations.

The gatekeepers of local newscasts are the news directors. They decide the content of the news programs and how the station's technology will be used to cover the news. They are the reasonable subjects to ask about satellite news gathering technology.

This study, then, seeks to determine how news directors at network affiliated stations in Oklahoma view satellite news gathering technology both as a news gathering tool and as a promotional tool.

Variables

The independent variable in this study is the experience each news director has had with satellite news gathering vehicles. This is measured as a frequency. News directors are asked how many times in an average week they use a satellite truck for news gathering. This allows a determination to be made whether a given news director is a frequent user of portable satellite news gathering equipment or not.

News directors' experience with satellite news vehicles is measured in a frequency since this appears to be the most reliable indicator. Since satellite news gathering is such a new phenomenon, the frequency with which they use the equipment is a fair indication of their total experience with it. Asking news directors how long rather than how often they have used satellite news gathering would not take into account the occasional user who rents a truck only for special events.

There are two dependent variables. They are attitude toward satellite news vehicles as news gathering tools and attitudes toward satellite news vehicles as promotional tools. These are measured using Likert scale items.

To obtain the Likert scale items that were used to measure each of the two dependent variables, a pool of 42 statements concerning both variables was prepared. These statements were then examined by a research expert, a university professor, and a news producer to determine the suitability of the statements as Likert items. Based on this pre-test, six items were chosen to measure each of the two dependent variables (See Appendix B).

Each of these Likert items allowed news directors to respond by placing check marks along a nine point scale. This scale represents a continuum from "strongly disagree" to "strongly agree." Positive items were scored so that a "strongly agree" response was assigned a attitude value of 9 and a "strongly disagree" response was assigned an attitude value of 1. Negative items (there are two) were scored in the opposite way with "strongly agree" assigned a value of 1 and "strongly disagree" given a value of 9.

The Questionnaire

The instrument used to measure these variables is a two page questionnaire. A cover letter briefly explaining the project and a stamped, self-addressed return envelope were sent along with the questionnaire. The questionnaire and cover letter were prepared as individually addressed form letters using Microsoft Word 3.11 running on an IBM clone computer. The template documents used to produce the cover

letter and questionnaire can be found in Appendix A and Appendix B, respectively.

Data Gathering Procedure

At this time there are only eight network affiliated television stations in Oklahoma. They are KWTW, KTVY-TV, and KOCO-TV in Oklahoma City; KJRH-TV, KOTV, and KTUL-TV in Tulsa; KSWO-TV in Lawton; and KTEN in Ada. Since there are so few stations included in this study, sampling is not necessary. The entire population was surveyed. Questionnaires were sent to all eight news directors at these stations. Follow-up phone calls were used until a 100% return rate was achieved.

Detailed statistical analysis with only eight respondents would not be worthwhile, so results are reported simply as mean attitude scores. The news directors' responses were then correlated using the Pearson R correlation coefficient to determine how similar the news directors were in their responses. A McQuitty's linkage was used to determine if there was more than one type of news director with regards to their attitudes toward SNVs. The results of these tests are reported in Chapter IV.

CHAPTER IV

FINDINGS

The purpose of this study is to determine the attitudes television news directors in Oklahoma have toward satellite news gathering vehicles (SNVs) and the experience on which they base their opinions. The news directors' attitudes toward satellite news gathering vehicles are measured with two different variables; attitudes toward satellite news vehicles as news gathering tools, and attitudes toward satellite news gathering vehicles as promotional tools. These are the two dependent variables.

The independent variable is the experience the news directors have with the vehicles. This experience is measured in a frequency by asking news directors how many times a week they use a satellite news gathering vehicle.

A two page questionnaire was sent to each of the eight news directors of network affiliated Oklahoma television stations. The questionnaire included an open ended question asking news directors how many times a week they use a satellite news gathering truck. The questionnaire also included twelve Likert scale items--six for each of the dependent variables. All eight of the questionnaires were correctly completed and returned.

Overall Attitude

One of the Likert statements, number 10, has proven to be unreliable. It reads, "The decision to purchase a satellite news vehicle is unaffected by whether or not other stations in the same market have satellite news vehicles." This statement is meant to measure the news director's attitudes towards satellite news vehicles as promotional tools. It appears that this one item does not measure attitude towards satellite news vehicles as a promotional tool, but rather under what conditions such a tool becomes important. Responses on this item were erratic. KWTV's news director responded to this item with a attitude score of 1 while KTVY-TV's news director responded with a attitude score of 7. This demonstrates the unreliability of the statement since KWTV's mean attitude score towards satellite news vehicles as promotional tools is higher than KTVY-TV's. This item is excluded from the study.

Television news directors of network affiliated stations in Oklahoma have an overall mean attitude score toward satellite news gathering vehicles of 6.18 out of a possible 9.00. This indicates that television news directors in Oklahoma have a mildly positive attitude toward satellite news vehicles.

News directors in Oklahoma have a slightly better attitude toward satellite news gathering vehicles as promotional tools than as news gathering tools. The mean attitude score toward SNVs as promotional tools was 6.60.

The mean attitude score toward SNVs as news gathering tools was 5.76. This indicates that news directors in Oklahoma have a somewhat positive attitude towards SNVs as promotional tools and a mildly positive attitude towards SNVs as news gathering tools.

Interaction Between Experience Levels and Attitude

On the questionnaire, the news directors were asked how many times per week they use a satellite news gathering truck. The one week time period was chosen because it is a natural time frame for news directors. Many of the stations that don't own a satellite news gathering truck use one much less frequently than once per week. The news directors at these stations solved this problem by crossing out the word "week" and replacing it with "year" or "month." Rather than deal with fractions, all the news directors' answers were converted to uses per year. This allows the KJRH news director's experience, for example, to be expressed as 6 times per year rather than 0.12 times per week.

News directors who have the most experience with satellite news vehicles have the same attitude towards them as news directors who have the least amount of experience with them. Table I shows that the four news directors with the most experience with satellite news vehicles have a mean attitude score towards them of 6.10 out of a possible 9.00. The four news directors with the least experience with satellite news vehicles have a mean attitude score of 6.26.

This difference is negligible and indicates that news directors with more experience do not tend to have either a more positive or a more negative attitude towards satellite news vehicles than news directors who have less experience with them.

TABLE I

INTERACTION BETWEEN NEWS DIRECTORS' EXPERIENCE WITH
SATELLITE NEWS VEHICLES AND THEIR MEAN ATTITUDE SCORES
TOWARD SATELLITE NEWS VEHICLES

	Most Experience	Least Experience	Mean
Number of respondents	4	4	
As a News Gathering Tool	5.84	5.67	5.76
As a Promotional Tool	6.35	6.85	6.60
Overall Attitude	6.10	6.26	6.18

Just as the overall attitude mean towards SNVs was the same between the experience levels, the attitude means toward SNVs as news gathering tools and as promotional tools were the same between experience levels as well. The four news directors most experienced with SNVs had a mean

attitude score of 5.84 toward SNVs as news gathering tools. This compares with an attitude mean of 5.67 for the four news directors with the least SNV experience. This difference is negligible and indicates that news directors who have more experience with SNVs have an attitude toward SNVs as news gathering tools that is no more positive or negative than news directors who have less experience with SNVs.

The largest, but still slight, difference between the news directors with the most and the news directors with the least SNV experience was the mean attitude score towards SNVs as promotional tools. The four news directors with the least experience with SNVs had a mean attitude score 0.50 higher than the more experienced news directors (6.35 and 6.85 respectively).

News Directors' Responses to Individual Items

The news directors' responses to individual items can be found in Table II. Of all the items, number 3 drew the strongest response. It reads, "Owning a satellite news vehicle improves a local station's ability to cover regional stories." News directors strongly agreed with this item and responded with a mean agreement level of 8.63 out of a possible 9.00. No news director responded with an agreement level less than 8 on this item. They also agreed quite strongly (mean attitude 7.88) with item 5 which reads,

"Satellite news vehicles are useful for covering late breaking news."

News directors most strongly disagreed (mean attitude 2.38) with item number 1. Item 1 reads, "Owning a satellite news vehicle will allow a local station to cover world news better." They also somewhat disagreed (mean attitude 3.25) with item 3 which reads, "Owning a satellite news vehicle reduces a local station's need for network news feeds." The third item that brought disagreement from news directors is, "Owning a satellite news vehicle does not make a station more ratings competitive with other stations in the same market even if the other stations have news vehicles," (item number 12, mean attitude 7.38).²

The remaining items drew moderate responses: "Owning a satellite news vehicle adds to the prestige of a station" (7.38); "Viewers are positively impressed when they see a local anchor reporting live from a distant remote" (7.00); "A station with a satellite news vehicle will probably cover worthwhile stories it otherwise would not" (6.75); and, "Viewers are positively impressed when they know a story is reported live via satellite remote" (5.88). Two of the items drew mild or neutral responses: "Owning a satellite news vehicle will allow local stations to give national stories a much needed local angle" (5.50) and, "A satellite news vehicle is a ratings booster" (5.38).

²This is considered a negative item and is coded as such. Therefore, a mean attitude of 7.38 indicates that news directors somewhat disagreed with this item.

TABLE II
NEWS DIRECTORS' ATTITUDE SCORES TOWARD SATELLITE NEWS
VEHICLES

Item	KWTV OKC	KTVY OKC	KOCO OKC	KTUL Tulsa	KJRH Tulsa	KOTV Tulsa	KSWO Lawton	KTEN Ada	Item Means
<u>Statements Concerning News Gathering</u>									
1	5	2	1	1	1	3	1	5	2.38
2	7	3	3	1	7	3	1	1	3.25
3	9	8	8	9	9	9	8	9	8.63
4	8	6	4	9	9	3	6	9	6.75
5	9	5	9	9	7	9	7	8	7.88
6	8	4	5	6	7	3	6	5	5.50
Means	7.67	4.67	5.17	5.83	6.67	5.00	4.83	6.17	
<u>Statements Concerning Promotion</u>									
7	8	7	7	6	8	7	9	7	7.38
8	7	5	5	7	6	3	9	5	5.88
9	8	6	5	7	7	8	9	6	7.00
11	7	2	6	5	5	6	6	6	5.38
12 ²	8	7	6	8	8	6	8	8	7.38
Means	7.60	5.40	5.80	6.60	6.80	6.00	8.20	6.40	
Overall Means	7.64	5.04	5.49	6.22	6.74	5.50	6.52	6.29	
Own an SNV?	yes	yes	no	yes	no	no	no	no	
Use/ Year	156	104	24	156	6	4	0	0	

Note: Item number 10 was excluded from the study as being unreliable (see page 29).

²This is coded as a negative item. A mean attitude score of 7.38 indicates that news directors somewhat disagreed with this item.

Interaction Between Station SNV Ownership and Attitude

News directors working at stations which own a satellite news gathering truck have a no more or no less positive attitude toward SNVs than news directors who work at stations which do not own an SNV. As indicated in Table III, there is only a very minor difference in attitude between the two groups. This holds true for attitude toward SNVs as a news gathering tool, as a promotional tool, and overall.

TABLE III

INTERACTION BETWEEN STATION OWNERSHIP OF A SATELLITE NEWS VEHICLE AND NEWS DIRECTORS' MEAN ATTITUDE SCORES TOWARD SATELLITE NEWS VEHICLES

	Own an SNV	Do Not Own an SNV	Mean
Number of Respondents	3	5	
As a News Gathering Tool	6.06	5.57	5.76
As a Promotional Tool	6.53	6.64	6.60
Overall Attitude	6.30	6.11	6.18

Other Interactions

The Oklahoma television markets included in this study range in size from ADI number 36 (Oklahoma City) to ADI number 173 (Ada).³ This means that of all the markets in the United States, the Oklahoma City market is the 36th largest (considered a medium market) and the Ada market is the 173rd largest (considered a small market). As table IV shows, the market size in which a news director works makes little or no difference in his attitude toward satellite news vehicles. The largest (but still slight) difference is that news directors in Oklahoma's smallest markets have a slightly more positive attitude towards SNVs as a promotional tool than Oklahoma's largest markets do (7.30 as compared to 6.27).

Station affiliation was also not a factor in the news directors' attitudes toward SNVs. The ABC affiliated stations are KTEN in Ada (primary affiliation, KTEN also has a secondary affiliation with NBC), KSWO in Lawton, KOCO in Oklahoma city, and KTUL in Tulsa. The CBS affiliated stations are KWTV in Oklahoma City, and KOTV in Tulsa. The NBC affiliated stations are KTVY in Oklahoma City, and KJRH in Tulsa. As Table V shows, news directors from stations affiliated with each of the three networks have similar attitude scores concerning SNVs both as news gathering tools and as a promotional tools.

³Broadcasting/Cablecasting Yearbook, 1986, (Washington, D.C.: Broadcasting Publications, 1986), pp. C-51,52.

TABLE IV

INTERACTION BETWEEN MARKET SIZE AND NEWS DIRECTORS' MEAN
ATTITUDE SCORES TOWARD SATELLITE NEWS VEHICLES

	ADI No. 36	ADI No. 52	ADI No. 126 & 173	Mean
Number of respondents	3	3	2	
As a News Gathering Tool	5.78	5.83	5.50	5.76
As a Promotional Tool	6.27	6.47	7.30	6.60
Overall Attitude	6.00	6.12	6.32	6.18

TABLE V

INTERACTION BETWEEN STATION AFFILIATION AND NEWS DIRECTORS'
MEAN ATTITUDE SCORES TOWARD SATELLITE NEWS VEHICLES

	ABC	CBS	NBC	Mean
Number of Respondents	4	2	2	
As a News Gathering Tool	5.46	6.33	5.67	5.76
As a Promotional Tool	6.75	6.80	6.10	6.60
Overall Attitude	6.05	6.55	5.86	6.18

Note: KTEN in Ada is affiliated with both ABC and NBC. KTEN's principal affiliation is ABC and is included here as an ABC affiliate.

Comparison Between the News Directors

The news directors' responses to the individual items were similar to one another. Table VI shows the Pearson R correlations between the eight news directors. A Pearson R correlation is a measure of how similarly the news directors responded to the items in the questionnaire. For example, the .741 correlation between the news directors at KWTV and KTVY means that if KWTV's news director rated item 1 higher than item 2, then there is a 74% chance that KTVY's news director will also rate item 1 higher than item 2. A correlation of .600 or higher is considered significant.

TABLE VI
INTERCORRELATIONS BETWEEN THE EIGHT OKLAHOMA TELEVISION NEWS DIRECTORS' ATTITUDE SCORES CONCERNING SATELLITE NEWS VEHICLES

	KWTV	KTVY	KOCO	KTUL	KJRH	KOTV	KSWO	KTEN
KWTV	-	.741	.852	.825	.873	.660	.659	.579
KTVY	.741	-	.586	.759	.784	.537	.738	.671
KOCO	.852	.586	-	.742	.597	.807	.712	.591
KTUL	.825	.759	.742	-	.703	.531	.812	.839
KJRH	.873	.784	.597	.703	-	.357	.569	.438
KOTV	.660	.537	.807	.531	.357	-	.557	.551
KSWO	.659	.738	.712	.812	.569	.557	-	.604
KTEN	.579	.671	.591	.839	.438	.551	.604	-

Performing a McQuitty's linkage on the correlations reveals that there are two types of news directors. This means that there appear to be two different schools of thought among television news directors in Oklahoma concerning SNVs. There are five Type I news directors. They are the news directors from KWTW in Oklahoma City, KTVY in Oklahoma City, KOCO in Oklahoma City, KJRH in Tulsa, and KOTV in Tulsa. There are three Type II news directors. They are the news directors at KTUL in Tulsa, KSWO in Lawton, and KTEN in Ada. As Table VII shows, both types of news directors are similar in their attitudes with four exceptions.

The strongest of these exceptions concern SNVs as a news gathering tool. Item 2 which reads, "Owning a satellite news vehicle reduces a local station's need for network news feeds," received a mean attitude of 4.6 from Type I news directors. This indicates that they have a neutral attitude toward this item. Type II news directors strongly disagree, unanimously, with this item. Item 4 which reads, "A station with a satellite news vehicle will probably cover worthwhile stories it otherwise would not," received a mean attitude score of 6.00 from Type I news directors indicating that they agree only mildly with this item. Type II news directors responded to the item with a mean attitude score of 8.00 indicating substantial agreement with this item.

TABLE VII
COMPARISON BETWEEN TYPE I AND TYPE II NEWS DIRECTORS

Item	Type I 5 Respondents	Type II 3 Respondents	Mean
<u>Statements Concerning News Gathering</u>			
1	2.40	2.33	2.38
2	4.60	1.00	3.25
3	8.60	8.67	8.63
4	6.00	8.00	6.75
5	7.80	8.00	7.88
6	5.40	5.67	5.50
Means	5.80	5.61	
<u>Statements Concerning Promotion</u>			
7	7.40	7.33	7.38
8	5.20	7.00	5.88
9	6.80	7.33	7.00
10	5.20	5.67	5.38
12	7.00	8.00	7.38
Means	6.32	7.07	
Overall Means	6.04	6.27	

Of the items concerning SNVs as promotional tools, two showed a difference between the two types of news directors. Item 8, "Viewers are positively impressed when they know a story is reported live via satellite remote," received a higher attitude score from Type II news directors than Type I news directors (7.00 as compared to 5.20). Item 12,

"Owning a satellite news vehicle does not make a station more ratings competitive with other stations in the same market even if the other stations have satellite news vehicles," also received a higher rating from Type II news directors (8.00 as compared to 7.00).⁴

Summary

Television news directors in Oklahoma have attitudes toward satellite news vehicles that are more positive than they are negative. Furthermore, they are slightly more positive toward SNVs as promotional tools than as news gathering tools. This is equally true of news directors who have extensive experience with satellite news vehicles and news directors who have little or no experience with satellite news vehicles. It is also equally true of news directors who work at stations that own SNVs as well as those who work where there is no SNV. Market size and station affiliation also made little or no difference in the news directors' responses.

All the news directors agree that SNVs are valuable regional news gathering tools. Most agree that SNVs are not useful for world news coverage (by a single station). While most news directors somewhat agree that SNVs are good image

⁴This is coded as a negative item. Therefore, Type II news directors are more likely than Type I news directors to agree that owning an SNV will make a station more ratings competitive with other stations in the same market that own SNVs.

boosters for the station, they apparently have no strong opinion as to whether or not the SNVs boost ratings.

Although there are two distinct types of news directors, they are very similar in their attitude towards SNVs. They differ on only four of the eleven items. They most sharply differ in that Type II news directors strongly disagree that SNVs will reduce a station's need for network news feeds while Type I news directors are neutral on this issue.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Whenever a new technology is applied to news gathering, there is an initial period of uncertainty as to what effect that technology will have on the industry. This is the stage that satellite news gathering (SNG) is in now. This study was developed to examine two variables which might foretell what role satellite news gathering will play in the future of this industry.

One unexpected finding is the apparent discrepancy news directors expressed with regards to satellite news vehicles (SNVs) and ratings. News directors are somewhat positive toward statements that depict satellite news vehicles as image boosters and agreed that SNVs make a station more ratings competitive, yet they are neutral on the item that reads: "A satellite news vehicle is a ratings booster." This might be explained by a statement made by one Miami news director who said:

Anybody who attaches any one piece of equipment to a ratings plan is crazy. Anything in television news that you try to attach directly to a ratings point is foolish. When you tie it all together and develop an image, that means ratings. People watch television to watch people. They don't watch television to watch trucks. But if I don't have a truck to get my people on and my

competition has a truck, I've been aced out of the game.¹

The somewhat positive attitude news directors have toward SNVs as a news gathering tool suggests that satellite news gathering is here to stay and will be used as a serious news gathering tool. If news directors used SNVs merely out of a sense of obligation to promote the station image or maintain parity with the competition, then it would be reasonable to expect that they would have a negative attitude toward SNVs as a news gathering item.

Television news directors in Oklahoma did make it clear in this survey that they view SNVs as useful tools for gathering regional news. They also made it clear that they did not consider an SNV to be an appropriate tool for gathering world news. The supposition often stated in the relevant literature, that local stations with SNVs will displace network news programs, is not true, at least in Oklahoma news.

Although there are two types of news directors, the differences between the types is slight. Type II news directors appear to be slightly more idealistic concerning SNV's, especially as promotional tools. They are slightly more likely to think that viewers will be impressed with satellite remotes and that owning an SNV will make stations more competitive in a market that already has SNVs. It is interesting to note that the three news directors in this

¹Kim Standish, "Satellite News Gathering: The Next Round," RTNDA Communicator, September 1986, p. 38.

type are working at the two very small market stations (KTEN in Ada and KSWO in Lawton) and KTUL in Tulsa which purchased a truck only eight weeks before the questionnaires were completed.

Conclusions

Oklahoma news directors considering the purchase of a SNV should consider them only as useful tools for gathering regional and local news stories. They should not expect the truck to bring higher ratings in and of itself. If a truck is purchased, however, a plan should already be in place to incorporate that truck into an overall enhanced station image.

Broadcast journalism educators in Oklahoma should incorporate satellite news gathering into their curriculum in some form. Educators should keep in mind that live, remote broadcasting from around the state, region and nation will likely become much more common. Educators should stress a working knowledge of satellite transmission and live reporting.

Television news courses should include information on satellite news gathering. Management classes may wish to present the relationship stations have with satellite news operators such as Conus. Promotional classes could include lectures on how to incorporate a satellite news gathering truck into a station's promotional efforts. A course in Programs and Audiences could include a discussion of whether

owning high technology hardware such as a satellite truck will result in higher ratings and Advanced Technology seminars could present portable uplink technology.

Recommendations for Further Research

There was some variance between the news directors surveyed for this study. Most of this variance is in the items concerning SNVs as news gathering tools. The mean scores ranged from 4.83 to 7.67, yet none of this variance is explained by any of the variables directly examined in this study. The study did find that this variance was not explained by the news directors' experience with SNVs or whether or not the station where the news director works owns an SNV. This variance is also not explained by market size where a news director works or the network affiliation of his station. Further study is needed to determine what causes this variance.

This study may also be repeated in different parts of the country to determine if there is a difference between Oklahoma and other states or to determine if geographical factors make a difference. A study is also needed to determine if station managers and news directors have differing attitudes towards SNVs.

A SELECTED BIBLIOGRAPHY

- Alter, Jonathan. "Anchors Away: At Home on the Farm." Newsweek, March 10, 1986. pp. 66-67.
- "AP, Conus form Satellite-Fed News Service." Broadcasting, June 2, 1986. pp. 57-58.
- Benedict, Ray. "Everything You Always Wanted To Know About SNG But Didn't Know to Ask." Television Broadcast, July, 1986. pp. 60-65.
- Bork, Robert H., Jr. "Conus the Barbarian." Forbes, November 4, 1985. p. 111.
- Broadcasting/Cablecasting Yearbook, 1986. Washington, D.C.: Broadcasting Publications, 1986.
- Broholm, John. "SNG Research." RTNDA Communicator, November, 1985. pp. 26-27.
- Carpinello, Cheryl R. "The Rush Is On." Via Satellite, July/August, 1986. p. 16.
- Carpinello, Cheryl. "Satellite Newsgathering Operators." Via Satellite, September, 1987. p. 37.
- Clary, Mike. "Live From Anywhere." Channels, Summer, 1986. pp. 63-66.
- "Conus Plans to Offer Full-Text TV Service of Capital Events." Broadcasting, August 19, 1985. pp. 69-70.
- Cummings, Gary. "The Elephant in the Parking Lot." Washington Journalism Review, January/February, 1987. p. 46.
- Drummond, William J. "Is Time Running Out for Network News?" Columbia Journalism Review, May/June, 1986. pp. 50-52.
- "Extending a Station's Reach a Little Farther." Broadcasting, July 14, 1987. pp. 44-49.
- Ferring, Mike. "Conus." RTNDA Communicator, February, 1985. p. 14.

- Hill, Arthur. "Comsat Offers Satellite Service." TV Technology, July, 1986. p. 28.
- "Hubbard Shares His Conus Vision." Broadcasting, February 3, 1987. pp. 54-56.
- James, Greg. "Learning to Live With Ku-Band Vehicles." RTNDA Communicator, October, 1986. p. 29.
- Kurz, Phillip. "Extending the Reach of Your News Coverage: A Down-to-Earth Look at SNG." Television/Broadcast Communications, July, 1985. pp. 36-40.
- Kurz, Phillip. "ENG: Going the Extra Miles for Service, Profits, and Ratings." Television/Broadcast Communications, November 1984. pp. 48-56.
- Kurz, Phillip. "SNG Gains Momentum." Television Broadcast, November, 1985. pp. 66-72.
- McNally, John P. "KWTW Retains Lead with S-20." TV Technology, July, 1986. pp.25-26.
- Merrell, Ron. "An Abundance of Technology Expands the Future of ENG." Television/Broadcast Communications, November, 1984. pp. 58-60.
- "NAB SNV Survey Finds More on Way." Broadcasting, April 6, 1987. p. 72.
- "NBC Is Latest to Offer Subsidized Ku-Band Trucks." Broadcasting, January 27, 1986. pp. 66-67.
- "Networks All On Satellite News Gathering Bandwagon." Broadcasting, July 14, 1986. pp. 49-51.
- "News in Newsgathering Technology." Broadcasting, September 23, 1985. pp. 51-52.
- Paulson, Bob. "How Not To Be Singed by SNG." RTNDA Communicator, January, 1986. pp. 22-23.
- Paulson, Bob. "New Technology and Improved Ratings: Harnessing One To Achieve the Other." RTNDA Communicator, March, 1986. pp. 32-33.
- Premack, John. "Straight From the Shoulder." RTNDA Communicator, September, 1987, pp. 83-84.
- Premack, John. "Will SNG Ever Be Banned in Boston?" RTNDA Communicator, November, 1985. pp. 22-23.

- Sanoff, Alvin P., Deborah Kalb, and Michael Kimmelman. "The Long Arm of Local News." U.S. News & World Report, March 16, 1987. p. 54.
- Sanoff, Alvin P., Deborah Kalb, and Michael Kimmelman. "The Way It Is for the Network News." U.S. News & World Report, March 16, 1987. pp. 51-54.
- "Satellite ENG." Broadcasting, April 29, 1985. pp. 54-56.
- "Satellite Newsgathering: Growing Presence at NAB." Broadcasting, April 6, 1987. pp. 71-72.
- "Satellites Giving Networks Greater News Freedom." Broadcasting, July 14, 1987. pp. 42-44.
- Singleton, Loy A. Telecommunications in the Information Age. Cambridge: Ballinger Publishing Co., 1983.
- "SkiBridge Satellite Vehicle Provides Earthquake Coverage." Aviation Week & Space Technology, October 14, 1985. p. 159.
- Smith, Conrad. "Newsgathering Technology and the Content of Local Television News." Journal of Broadcasting, Winter, 1984. pp. 99-102.
- "SN Vehicle Technology Refined." TV Technology, August, 1987. p. 9.
- Standish, Kim. "Preparing for the Pope: Stations Pushed to their Capacities." RTNDA Communicator, September, 1987. pp. 24-25.
- Standish, Kim. "Satellite News Gathering: The Next Round." RTNDA Communicator, September, 1986. pp. 37-44.
- "Talk of the RTNDA Convention: SNG Networks." Broadcasting, September 23, 1985. pp. 48-49.
- Wagner, Bill. "News on the Move: SNG." RTNDA Communicator, November, 1985. p. 20.
- Zavistovich, Alex. "SNV Growth, Future Examined." TV Technology, July, 1987. p. 11.
- Zavistovich, Alex. "TV Stations Critique SNV Use." TV Technology, August, 1987. pp. 9-10.
- Zoglin, Richard. "Everywhere but in Manila." Time, March 10, 1986. p. 61.

APPENDIXES

APPENDIX A

COVER LETTER TEMPLATE

<DATA NEWSDIRC.DOC>

Rex Kullmann
1900 North Washington 7A
Stillwater, OK 74075

<firstname> <lastname>, News Director
<station>
<address>
<city>, OK <zip>

Dear <title>. <lastname>,

I am a graduate student at Oklahoma State University working on my thesis about satellite news gathering technology, specifically satellite news vehicles. I am asking you and the other Oklahoma television news directors to help me by completing the enclosed questionnaire and returning it in the self-addressed, stamped envelope provided.

By studying responses, I hope to discover what value Oklahoma news directors see in this new technology. The results should help broadcast journalism educators prepare students for this new technology by anticipating how the technology will be used in the future.

Please take a few moments to fill out the questionnaire. Your cooperation is greatly appreciated. If you would like a copy of the results, please so indicate on the questionnaire. Thank you.

Sincerely,

Rex Kullmann

APPENDIX B

QUESTIONNAIRE TEMPLATE

Owning a satellite news vehicle will allow local stations to give national stories a much needed local angle.

Strongly Agree Strongly Disagree

Owning a satellite news vehicle adds to the prestige of a station.

Strongly Agree Strongly Disagree

Viewers are positively impressed when they know a story is reported live via satellite remote.

Strongly Agree Strongly Disagree

Viewers are positively impressed when they see a local anchor reporting live from a distant remote.

Strongly Agree Strongly Disagree

The decision to purchase a satellite news vehicle is unaffected by whether or not other stations in the same market have satellite news vehicles.

Strongly Agree Strongly Disagree

A satellite news vehicle is a ratings booster.

Strongly Agree Strongly Disagree

Owning a satellite news vehicle does not make a station more ratings competitive with other stations in the same market even if the other stations have satellite news vehicles.

Strongly Agree Strongly Disagree

If you would like a copy of the survey results, please check here.

Thank you for your time and cooperation. Please return this survey to:

Rex Kullmann
1900 N. Washington 7A
Stillwater, OK 74075

VITA ²

Rex Moore Kullmann II

Candidate for the Degree of
Master of Science

Thesis: A COMPARISON BETWEEN TELEVISION NEWS DIRECTORS'
EXPERIENCE WITH SATELLITE NEWS VEHICLES AND THEIR
ATTITUDES TOWARD SATELLITE NEWS VEHICLES IN
OKLAHOMA

Major Field: Mass Communications

Biographical:

Personal Data: Born in Wichita, Kansas, June 14, 1960,
the son of Rex and Norma Kullmann.

Education: Graduated from Edmond Memorial High School,
Edmond, Oklahoma, in May 1979; received Bachelor
of Arts Degree in Radio-Television-Film with
emphasis in Production and Performance from
Oklahoma State University in May 1985; completed
the requirements for the Master of Science degree
at Oklahoma State University in December 1987.

Professional Organizations: Member of Alpha Epsilon
Rho-The National Broadcasting Society, January,
1985, to present; Member of International
Television Association, October, 1986, to present.