Emergency Preparedness Canada
Protection civile Canada

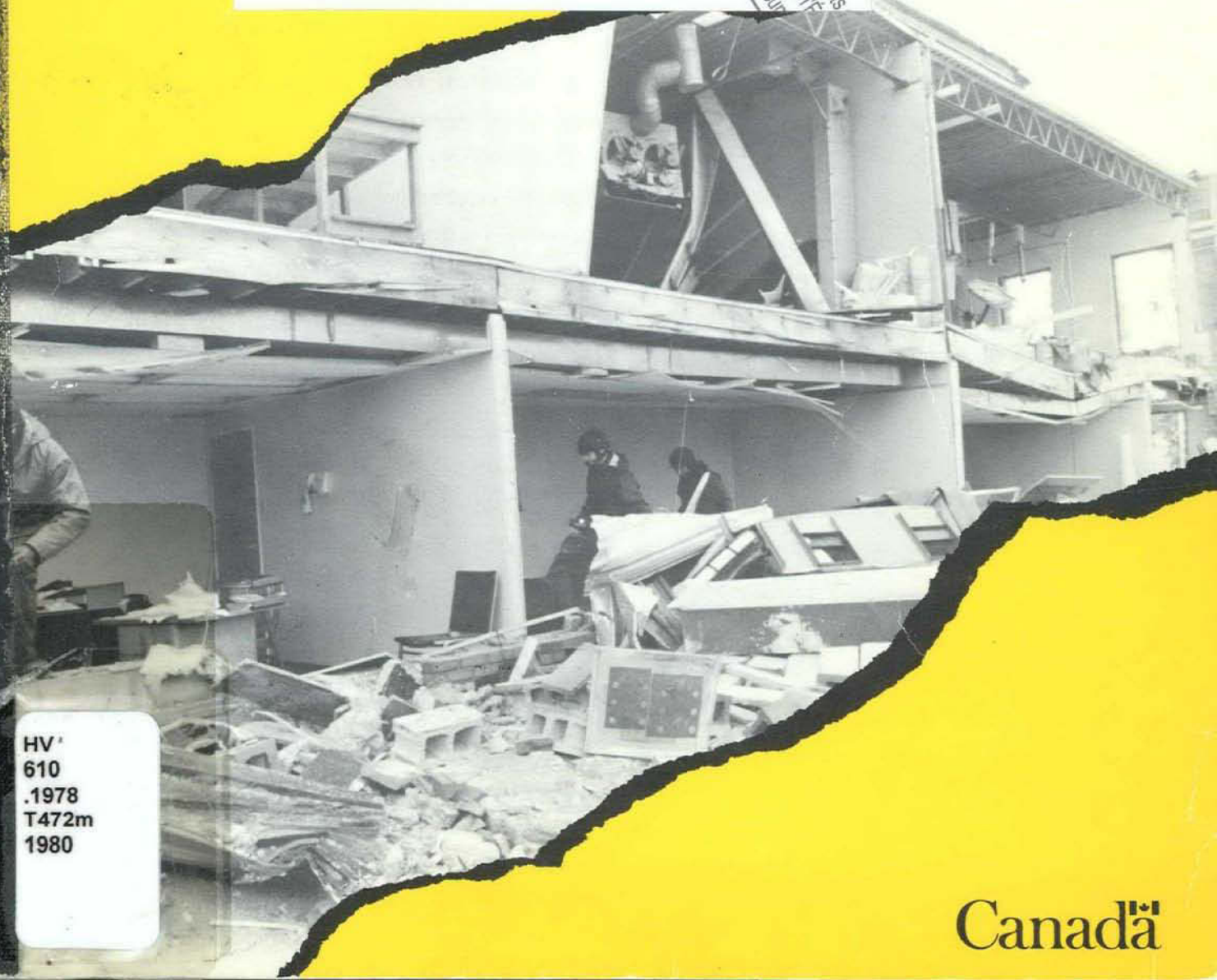
# THE MEDIA AND THE 1978 TERRACE FLOODS :

## an initial test of an hypothesis

by

Joseph Scanlon







Canada

# THE MEDIA AND THE 1978 TERRACE FLOODS :

## an initial test of an hypothesis

by

**Joseph Scanlon**

# "The Media and the 1978 Terrace Floods: An Initial Test of An Hypothesis"

Paper prepared for the N.R.C.'s Committee on Disasters and the Mass Media

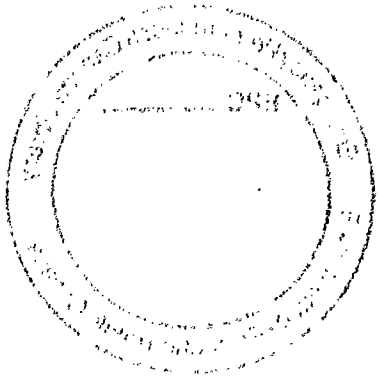
Washington
February 22-23, 1979



Joseph Scanlon
Senior Researcher
Emergency Communications Research Unit*
Carleton University
Ottawa K1S 5B6, Canada

* The Emergency Communications Research Unit (ECRU) is a stand-by research unit which has existed formally since 1973. It consists of two faculty -- Brian Taylor and Joseph Scanlon -- and a group of volunteer students. ECRU's main funding comes from the Canadian crisis agency, Emergency Planning Canada.

This paper represents a somewhat revised version of a paper presented to a meeting of N.R.C.'s committee on disasters and the mass media in February, 1979. The detailed analysis of the research in Terrace is still going on and a more thorough review of the role of the media will be included in a study being prepared for publication by ECRU later. The author wishes to acknowledge that the funds for the project came entirely from Emergency Planning Canada as did most of the funds for the earlier ECRU studies mentioned in this paper.



For some years now, the Emergency Communications Research Unit (ECRU) at Carleton University has been examining patterns of communication and response to unexpected events.[1] The events studied have ranged from a windstorm,[2] a mudslide[3] and snowstorms[4] to a building explosion[5], fires,[6] murders[7] and hostage incidents.[8] They have occurred in communities across the country, everywhere from Newfoundland's East coast to Vancouver Island's West Coast.

In most of these studies, almost as a matter of course, some attempt has been made to gather data about the role of the mass media, both the print media and the electronic media, radio and television.[9] In some, the entire focus of the studies has been on the role of media in a crisis situation. And, in one published study, this research was extended to a review of media accuracy in the wake of unexpected events, accuracy both in local and national news media.[10]

Studies of accuracy, however interesting, nevertheless ignore an important aspect of media performance. They deal with the correctness of what is reported, not with the adequacy or completeness of those reports. In fact, it is quite possible accuracy might be highest in the skimpiest possible report: there would be fewer possibilities for error.

In mid-November, 1978, shortly after a meeting of N.R.C.'s Committee on Disasters and the Mass Media in Washington, ECRU had another opportunity to study an unexpected event. A few weeks' earlier, devastating floods had hit British Columbia's Pacific North-west, a region just south of Alaska.

En route to this event -- as a result of the discussion at the meetings in Washington and some conversations immediately afterwards -- it was decided the occasion might be appropriate for a somewhat different look at the media. Perhaps a model could be hastily constructed and then tested, both in an examination of media content and through the use of specific media-

...2

related questions in sample questionnaires.

This process was started and it is now partially finished. Local and regional media content has been collected and partially analysed. Relevant questions were put in the sample questionnaires and responses secured. Contacts are being established with outside media so the national media systems can also be examined.

In a few months' time, it is hoped that all this data will be put together and that a more detailed revised hypothesis will be constructed and tested. In the meantime, this preliminary paper has been prepared. While it is, admittedly, short on detailed references, it reflects, quite accurately, what we have found.

## The Hypothesis

Essentially, the hypothesis was that the media would not provide any advance information about the possibility of disaster or what to do about it, or any post-disaster information about what might be done to avoid future occurrences. The media coverage would focus almost entirely on the "big bang", the disaster itself.

It was also assumed that the public would pay close attention to the media during the impact period but that unusual media attention would fade away as the period of impact passed.

Finally, in line with previous research, it was assumed that the initial coverage would include a number of errors of detail although the tone of the coverage would be reasonably accurate.

Essentially, then,the coverage would ignore anything relating to mitigation and would focus instead on the dramatic aspects of the story while the disaster was actually in progress.

...3

There was one further element to the hypothesis: that the coverage in the media in the provincial and federal capitals would be even more attuned to the temporary, dramatic qualities of the event and that administrators and elected persons would get their media perspective in the form of a short burst of media activity as if the disaster had passed by like a meteor, catching momentary attention but coming from nowhere and having no lingering consequences for government policy.

The Disaster

What actually happened?

The Terrace disaster -- Terrace, population 11,000, is the central community -- involved a build-up in weather conditions in late October, 1978, that led to a series of weather-related problems. The result, eventually, was a great deal of devastation and some severe economic effects.

The weather had three elements: continuing and unseasonal warm temperatures, temperatures that did not dip below zero (celsius) for 10 days; continuing high winds; and record rainfall, 203.9 millimeters (8.03 inches) in 48 hours. The warm temperatures melted the snow and moved up the freeze line; the winds battered trees and power lines and whipped up water in lakes and rivers and turned the rain into a pounding, driving spray; and the rain itself, added to the melting snow, quickly turned mountain streams and rivers into raging torrents of water and debris. (Many streams either overflowed or changed course.)[11]

The effects of all this built up over about a four-day period:[12]

- Monday, October 30th, there were power outages and phone breakdowns caused by the initial high winds;
- Tuesday, October 31st, there were floods and washouts in the rural areas and most logging operations shut down; some communities were cut off; a passenger train was derailed by a slide;

...4

- Wednesday, November 1st, serious flooding began -- some people were evacuated -- and the floods took out the main highway and a number of concrete and steel bridges; late that day the natural gas pipeline was broken in two places; the rail line was washed out and hit by slides;
- Thursday, November 2nd, the rail line broke taking with it part of a work train and the lives of two crew members.

By the time the first phase of the storm ended -- there was more rain a few days later -- about a dozen communities were isolated and the area was cut off by road and rail and threatened with a loss of its major fuel resource. Home owners were asked to turn down their thermostats. Many schools closed.

The economic effects were many and varied.

The flooding and washouts in rural areas closed down logging camps, washed away logs and tore down some utility lines. Most camps closed for two weeks or more. The loggers lost all their wages -- at the minimum about a quarter of a million dollar loss.[13]

The washouts in the main highways left individuals separated from their jobs and their supply centres. Some lost wages or contracts. Others ran short of food or essential medicine.

The highway breaks cut off travel by passenger car, by bus and by truck. Private citizens were trapped between breaks, sometimes forced to accept welfare relief. Several persons were injured in highway accidents. The bus companies ceased operations temporarily laying off staff. The transports halted, sometimes abandoning perishable goods and suppliers shifted to other forms of transportation (air or barge) at higher cost.

The rail break isolated the northern port of Prince Rupert, cutting off

...5

grain shipments to the Orient, and trapped hundreds of empty cars between the Pacific and the break. A number of grain ships were diverted; the harbor lost substantial business.

The effect on grain shipments is almost incalculable. The ships en route to Prince Rupert were diverted to Vancouver (three extra days sailing at $7,000 per day) where they were forced to join a line-up. The total delays -- the diversion and wait in Vancouver -- probably backed up their schedules for months.

The break in the fuel line forced some businesses to close, others to adjust or cut back. One firm in Prince Rupert had to shut down entirely and give up work on a contract. It needed the gas to operate. Two others -- both multinational giants -- were forced to cut to half shifts. Two others closed their kilns and shipped green rather than dry lumber using ships via the Panama Canal rather than rail to the East. The costs were -- on the whole -- about $39 per 1,000 board feet higher, running to more than half a million dollars. The workers who normally run the kiln were laid off.

Some individuals -- mainly persons who had built on known flood plains (spring flooding is very common in the area) -- suffered losses to homes or cottages. The damage was caused by flooding from both a lake and over-flowing streams, by silt carried by the flood waters and by debris pounding at some of the buildings as the water poured down from the mountains.

The various affected services -- highways, rail, gas company, telephone company, etc. -- were forced to spend millions of dollars to make repairs. They all worked at incredible speed. The highway was back in service in less than 10 days. The gas service was maintained at low pressure (with substantial public co-operation by reduced consumption and lower thermostats in homes).[14] The rail line was back in roughly a month.

...6

Media Coverage

During the peak impact period -- the night the highway, gas line and rail line went and the two men died -- media coverage began to focus on the event and treat the incident as of major importance. The two Vancouver television stations -- the CBC station and the CTV-affiliate -- sent reporters and cameras into the area even, on two separate occasions, chartering a jet.[15] Other media gave the story prominence.

The impact stories concentrated on the devastation, the flooding, the stranded travellers and, above all, the two men who died.

The initial coverage -- which focused on the rail deaths -- was generally correct in the impression it left but inaccurate in detail.[16] The main Canadian Press report, for example, said telephones were out. This was true only of two communities. It was never true for Terrace itself. (The report had been telephoned to CP, Vancouver, from Terrace.) The initial reports of the railway accident talked about a slide knocking the train into the river. Actually the train was first hit by a washout then hit again by the ground giving way under an idling engine; there were two accidents.

Although the survey results have not been analysed the interviewers reported people in the region did pay more attention to the media, radio and TV, during the flood period. This attention faded once the main services were restored.

Despite the slow build-up -- the first problems began on Monday, the deaths were Thursday morning -- the media carried no real warnings either in the area or outside. Environment Canada, which collects and disperses Canadian weather data, reported the rainfall but did not interpret it as a flood warning. Only later in the week -- when another heavy rain was forecast --

...7

did the weather bureau make any attempt to issue flood warnings. (These came, apparently, on the initiative of one man.)

The media coverage within and without the region did not deal with mitigation information either before the flood or after it. While there was some discussion of the fact people were living on a flood plain there was no debate about what should be done about it. Individuals were told -- mainly through the media -- they would receive compensation for personal losses though this should not be considered a precedent.

There were two other aspects to media coverage and media performance.

First, the local radio and TV station, CFTK, Terrace, played a critical role. It, quite often, was the first place to receive news of specific disaster-related problems.[17] Individuals in difficulty would call the radio station rather than an official agency. The station would then, quite quickly, pass that information on to the various authorities. It was also the first place to put the overall situation together. A number of local officials said they had not viewed the situation as being close to a disaster until they heard the reports of the media. The various response agencies tended to work on their own and not share information. Thus they learned the general picture only by listening to radio and/or watching television. Radio and TV, therefore, played a critical role in defining the extent of the emergency situation.

The local media also played a role not often mentioned in the literature though a similar role has been seen by ECRU in two other emergency situations. At the request of the RCMP, local media personnel moved into the police office and took over the job of handling the release of information to all outside media personnel, acting in effect as public relations officers for the RCMP. The local news personnel playing this role were given access to all information available to the police and,

because of their location beside the radio, they could in fact hear all that was going on.[18]

Both police and media expressed extreme satisfaction with the way this arrangement worked. The media were especially pleased because they knew that they were getting information as quickly as the authorities and that nothing was being concealed from them.

But despite the tremendous economic problems, the media, except for one newspaper,[19] largely ignored this aspect of the story. It particularly ignored the problems concerning individual workers, and there was very limited reporting of overall economic effects.

Discussion

What all this means is that the Terrace disaster -- at least in the minds of those outside Terrace -- was presented as a flood situation that damaged highways, rail lines and other utilities and left persons with damaged homes. It was not portrayed as an economic disaster and the individual economic problems were largely ignored.

What it also means is that the floods were viewed as a flash, unpredictable situation and not one that, as we have shown, built up over time. There is no perception of the possibility of adequate warning.

This means that the decision makers -- in the region, in Victoria, in Ottawa -- were not given any media information that would have made them treat the disaster in terms of individual losses other than property damage. (It is also a fact that such information was not being made available by other means.)

The Terrace disaster, therefore, was a particular kind of event -- one that was unpredictable, unpreventable and one that had certain, specific kinds

of effects. It was not portrayed completely and it was not accompanied by any information related to preparation or avoidance.

There was one other rather strange aspect to the Terrace flood situation, 1978, and that was that the interviews -- while they did not ask about possible cause -- did turn up endless volunteered comment that logging practices and highway construction customs had led to the floods. Many, many persons charged that the custom of clearing large areas had created the potential for flooding. This aspect of the story -- the widespread public conviction as to cause -- did not show up in any media accounts.

## Conclusion

On an initial examination, then, the Terrace flood study suggests that the hypothesis that the media will concentrate on the impact period and ignore mitigation-type stories is substantially accurate. It is also true that initial stories will be inaccurate.

It appears to be also true, however, that media coverage will ignore certain other aspects of disasters, thus distorting the information that flows to policy makers and that these distortions or omissions are duplicated by the official flow of information.

Finally, it appears quite possible that the media, rather than some other agency, may serve as the central focus of data collection, as the agency that synthesizes what is going on and puts it in perspective.

The media, therefore, in many ways, play a critical role in defining the disaster and appear to help shape the public conception of what was involved. It is a role that appears to be at the heart of disaster prediction, management and response and a role that is therefore worthy of far more detailed examination.[20]

## ENDNOTES

1 The basic approach by ECRU to research has been described in: Joseph Scanlon and Brian Taylor, "A Stand-By Research Capacity," Mass Emergencies (vol. 2, 1977), pp. 35-41. A more detailed outline of the procedure is in: Joseph Scanlon and Brian Taylor, An ECRU Manual, Ottawa: ECRU, 1979.

2 James Jefferson and Joseph Scanlon, "The Sydney/Big Storm Report". (Ottawa: Emergency Planning Canada, 1974).

3 Joseph Scanlon, Jim Jefferson and Debbie Sproat. The Port Alice Slide. Ottawa: Emergency Planning Canada, 1976; Joseph Scanlon, Jim Jefferson and Debbie Sproat, "Initial Crisis Response. Mud Slide in Port Alice, Canada". EKISTICS, July, 1977, pp. 27-31.

4 Joseph Scanlon and Brian Taylor. Two Tales of A Snowstorm. Ottawa: Emergency Communications Research Unit, 1977. There is also an unpublished study of a snowstorm in St. John's, Newfoundland (The St. John's/Wyatt Study, 1974).

5 Joseph Scanlon and Brian Taylor. The Warning Smell of Gas. Ottawa: Emergency Planning Canada, 1975.

6 Joseph Scanlon and David Tait. The Fort Garry Court Fire. Ottawa: Emergency Planning Canada, 1976; Joseph Scanlon, with Darlene Harapiak and Mary Lou Tario. The Goulds Fire: Emergency Communications in Newfoundland. Ottawa: Emergency Planning Canada, 1977.

7 Joseph Scanlon, "The North Bay/Slater Study". Unpublished; William Wotherspoon and Joseph Scanlon, "Crisis Communication," Royal Canadian Mounted Police Gazette, Vol. 16, No. 11, pp. 8-11.

8 Joseph Scanlon and Brian Taylor and David Tait. The Oak Lake Incident. Ottawa: Emergency Communications Research Unit, 1978; Joseph Scanlon with Brian Taylor and Wendy Blum. The Dorchester Hostage Taking. Ottawa: Emergency Communications Research Unit, 1977.

9 The two hostage incident studies are case studies in police/prison and media relations. See: The Oak Lake Incident, op. cit., and The Dorchester Hostage Taking, op. cit.

10 Joseph Scanlon, Rudy Luukko and Gerald Morton, "Media Coverage of Crises: Better Than Reported, Worse Than Necessary", Journalism Quarterly, Vol. 55, No. 1 (Spring, 1978), pp. 68-70. The question of accuracy in the general sense was dealt with earlier: T. Joseph Scanlon, "A New Approach to Study of Newspaper Accuracy", Journalism Quarterly, Vol. 49, No. 3 (Autumn, 1972), pp. 587-590.

11 This data was collected as part of the ECRU research team's analysis of the flood situation. Seventeen persons -- 15 students plus Brian Taylor and the author -- were involved in the field research: John Crump, Nancy Hall, Carl Hanlon, Theresa Jarzab, Peter Laywine, Jill Lewis, Denise Losier, Matt Maychak, Margo McDiarmid, John Sadler, Karen Sallows, Karen Sample, Denise Schon, Nigel Simms, Rob Wooler.

12 This build-up period can be clearly identified given the evidence collected by ECRU. It was not perceived as such by those in the Terrace area at the time.

13 No specific figures were supplied by companies. However, it was possible to calculate these estimates from regular pay scales and normal hours of work per week. ECRU intends to place more attention on such economic effects in its next study.

14 This co-operation included one incredible incident. The morning of the day the second break in the gas line was repaired, the gas company used local media to plead with people to turn off their thermostats. The public response was apparently immediate and total: the gas company's measuring instruments recorded no measurable drop in gas pressure all that day.

15 Since a check showed virtually no visits to the region in the weeks before the flood, the decision to spend more than $2,000 on a jet was dramatic. The TV stations also managed to get rides on the dozen-plus helicopters flying various emergency missions. The private CTV network also fed one story via a special hook-up from nearby Prince George, a hook-up never before used in feeding tape and a live image.

16 It was extremely difficult to obtain accurate information. Railway employees are all instructed not to talk to the media.

17 The first major flood response occurred when the radio station passed on a complaint (complete with name and phone number) to the RCMP, which after checking activated the local search and rescue unit (part of the Provincial Emergency Program).

18 The decision to do this flowed from a meeting between the local senior RCMP officer and local news personnel following police-media conflict after a plane crash. The police followed advice given by media at that time. The RCMP act as the municipal, provincial and federal police force in Terrace and area, a common situation in eight of Canada's ten provinces.

19 These reports in Prince Rupert were not picked up by outside news media or by the Co-operative news media, the Canadian Press. Nor were they reported in Terrace, the nearest community.

20 It is also a role that is of tremendous importance given the agenda-setting literature. The literature suggests the media tell us not so much what to think, as what to think about. If this is the case -- and there is substantial evidence for this -- then the role of the media in relation to the Terrace floods was to limit the areas in which government court respond to the effects of the flood as such, rather than to the spinoff of these effects. Maxwell E. McCombs and Donald L. Shaw, "The Agenda-Setting Function of Mass Media," Public Opinion Quarterly 36 (1972), pp. 176-187; see also: Gormley, William Thomas Jr.,"Newspaper Agendas and Political Elites," Journalism Quarterly 52 (1975), pp. 304-8.

The media and the 1978 Terrace floods : an initial test of an hypothesis /