

DISASTER RESEARCH CENTER
THE OHIO STATE UNIVERSITY
COLUMBUS, OHIO 43201

Working Paper #49

SOME OBSERVATIONS ON ORGANIZATIONAL RESPONSE TO THE
SNOWSTORM IN COLUMBIA, SOUTH CAROLINA, FEBRUARY 9, 1973

By

J. Rick Ponting
Department of Sociology
Disaster Research Center
The Ohio State University

E. L. Quarantelli
Department of Sociology
Disaster Research Center
The Ohio State University

3/73

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Objective

Around February 10, 1973, press reports indicated that a largely unexpected and very heavy snowstorm hit large sections of the southern United States, an area unaccustomed to such an event. Statements by various officials and requests for a federal declaration of a disaster suggested that some localities had experienced a severe emergency and a crisis because of the heavy snow. On the basis of these and other reports, the Disaster Research Center sent a three-man research team to Columbia, South Carolina. The team stayed three days, from February 26 through February 28, concentrating on storm-associated activities around the state capital of Columbia, and attempting to get answers to three questions:

- (1) If a disaster had occurred, in what way and how was the community response coordinated;
- (2) What role did the local civil defense organization play in the coordination and other storm-associated organizational responses; and,
- (3) To what extent would it be possible in such a kind of situation to assemble documentary data, especially organizational logs, by which we could reconstruct the sequence of organizational events and actions happening before, during and after a community emergency?

Field Work

The field team contacted personnel from approximately three dozen organizations including:

- City-county civil defense office
- City police department
- City fire department
- City manager's office
- City public information office
- City public works department

- Local transportation division
- Local hospitals (2)
- Local television station
- Local newspaper company
- Local ministerial association
- Local taxi-cab company
- Local Red Cross chapter
- Local Salvation Army unit
- Local Chamber of Commerce office
- Local Army National Guard unit
- Local county sheriff's office
- Local state highway patrol post
- Local airline offices (2)
- Local United Fund office
- Local railroad and Amtrak offices (2)
- Local bus line office

Local telephone company office
Local gas and electric company office
Local post office
Local U.S. Weather Service office
Local airport office

In the case of civil defense and other emergency organizations, intensive interviews were conducted with key officials. In the instance of the other groups, prime focus was on obtaining documentary data, and establishing what organizational records were kept. While a DRC staff member sat in on a meeting of over 40 local civil defense directors, organized by state civil defense, no attempt other than that was made to obtain any information about storm-associated activities outside of Columbia (and the county in which it is located -- Richland).

Cooperation by city and local officials ranged from good to excellent. In only one case of a non-emergency organization, did there seem to be a definite effort to hold back available information. As will be indicated later, DRC was not able to obtain certain desired data, but this generally was not because of lack of organizational cooperation. The state civil defense director apparently misunderstood the DRC mission, thought the team should be run as a military group, and probably was disturbed that one of our staff members unintentionally observed and was told that local civil defense groups thought the state civil defense had been "incompetent" (a term used by several local civil defense officials) in the recent snow emergency. The DRC team had no interest in and no way of evaluating this local judgement of the overall situation in South Carolina, but it was obvious that conflict and disagreement between local groups and the state level had existed long before the situation of February 10. Some of the Columbia civil defense group, which cooperated extensively with the DRC team, openly stated and volunteered the information that there were "poor" relationships between the local people and the state civil defense director.

Preliminary Findings

Our findings, based on overall and general impressions of the field team, can be grouped under the three general questions which DRC asked about this situation.

1. There was neither the need nor an attempt to have overall community coordination in Columbia.

This state, and the locality around Columbia, as far as local people are concerned, is not particularly subject to natural disasters. Nevertheless, the possibility of such events is recognized, even though on the basis of recent past experience, they are not assigned high probability of occasioning major problems. Thus, in the last 15 years, the city has had four winter weather situations which caused problems, but not disasters. In 1958, Columbia had a snowstorm rather similar to the one in February of 1973. In 1966, it was hit by an ice storm which created some problems. In 1970, some parts of the city lost power for a while because of another ice storm. And earlier this year, in January, an ice storm temporarily caused some inconveniences.

Thus, when on February 9 and 10, 1973 over 16 inches of snow fell in the city, even though such an accumulation had not been at all forecast, it was not that strange an experience. There was also not much expectation that it would be much of a problem although schools were dismissed at noon on Friday. In actual fact, the only "disaster" was in the transportation area. It was simply very difficult and in many cases impossible to drive cars or move around, especially since for all practical purposes almost no snow-removal equipment is available in the city. The fact that most of the snow fell on a Saturday, however, meant that for local people there was much less need to move around than if the storm had occurred during the week. In about three or four days most of the snow had melted or been removed enough to allow relatively free passage in the city, although easy movement in the surrounding county area remained difficult for much longer.

Such community problems as occurred tended to be rather limited in scope, such as the difficulty of getting staff and victims to hospitals (which we shall discuss later), or the necessity of calling off church services in the city on Sunday. It was true that the city public schools were closed through Wednesday, but this was a rather unusual step and was partly related to the more severe problems of movement in the surrounding county area. For the city as a whole the event was far more a short-lived inconvenience than a major, long disruption of community life.

Consequently, except for the transportation problem, there was little need to organize an overall community response to the event. Columbia's weekend routines were not disrupted very much. And, unlike other localities around the state which found themselves in some cases having to house as many transients as the total local population (one town of 7,000 suddenly and overnight had to house 7,500 travelers and tourists caught in the storm), Columbia had no major influx of outsiders. Likewise, there were no problems with low food supplies, power and fuel shortages, or absent public transportation (except on Sunday) as experienced even in nearby communities and elsewhere in the state.

2. The Columbia civil defense office did play a key role in such storm-associated organizational responses as did occur.

The local civil defense office (a joint city-county group) has both saliency and legitimacy in Columbia. This view is held not just by the local civil defense personnel, but by other organizations in the community. The Columbia office is not very nuclear-warfare oriented; it has well developed disaster plans and is also heavily involved in other community problem areas. Its disaster planning is illustrated by the fact that in 1969 the office prepared a 50-page planning paper for natural emergencies which not only drew a detailed parallel between what happened in communities in Mississippi during Hurricane Camille and what could happen in Columbia during different kinds of disasters, but also detailed the disasters that could hit the area, as well as certain kinds of supplies and facilities needed (e.g., the estimated food caloric supply levels needed for the county). Furthermore, not only is there an established 1200 sq. foot EOC with an elaborate communication system, but perhaps most important of all, yearly simulations of disaster plans are undertaken, especially those involving civil defense linkages with law enforcement agencies and hospitals. The involvement of the local civil defense office in other community problem areas is indicated by its ability to

obtain LEAA funds and Highway Safety funds for some of its activities, and the official position that the office has responsibilities in the entire public safety spectrum.

In the snowstorm situation, the EOC was partly activated. Representatives from the police department and the county sheriff's office were present, but not from many other organizations. Civil defense established contact with other key groups primarily through a series of conference calls from the EOC. The NAWAS line with the U.S. Weather Service was also used.

Several meetings were also held, the key one being a meeting under civil defense on Saturday which established the division of labor to be used with regard to the transportation problem. At this meeting, it was decided that the National Guard would transport people to one of the hospitals, and that the sheriff's department and the police would arrange getting people to the other hospitals. In both cases this involved not only getting staff members to the hospitals, but also insuring that emergency medical cases, such as heart attacks, would have quick transportation. This special system of transportation was maintained for about four days.

Helping to set up and coordinate this transportation system was the major function of the local civil defense office. This had to be worked out in a somewhat ad hoc fashion because transporting hospital personnel, despite the considerable disaster planning and the simulations, was a "problem that had been overlooked." The saliency and legitimacy of local civil defense as well as its links to other key emergency organizations undoubtedly helped in working out a transportation plan, despite the absence of prior planning on this point.

The disaster plan, it was also observed, had developed no priorities for street cleaning. However, even with a set of priorities, not much could have been done without snow-removal equipment. Some equipment that could be used for this purpose was eventually borrowed from the county, after the civil defense office refused an offer of a loan of such equipment from the nearby Army base (although accepting the use of jeeps and drivers).

Other functions carried out by civil defense were keeping everyone informed of actual conditions in the area, and referring individual requests for assistance to the Red Cross. In connection with the first task, the local office not only generally informed the key organizations involved, but provided information for the general public too. The local civil defense director used the local mass media channels several times to make announcements.

Overall, it is clear that the Columbia civil defense office took an active and key role in such organizational storm-associated activities as took place in the city. Its role and functioning was accepted by other organizations. Much of this acceptance seemed to have stemmed from its prior disaster planning and emergency simulations, as well as its pre-crisis established links with other emergency groups in the area. The activities of local civil defense in this event reinforced the positive image of civil defense already held by other organizations in the area.

We do not know the general public view of civil defense in Columbia as this was not a focus of the DRC study, but it is difficult to see how it would not have been positively reinforced by what the local office did.

3. Documentary data can be obtained in such situations as occurred in Columbia, but it will be incomplete and not allow a full reconstruction of the sequences of community organizational activities.

A number of problems surfaced in the DRC attempt to obtain documentary data in this situation. The following are some of the major difficulties we found along with the factors involved.

(1) Decentralization of record keeping.

Some organizations do not maintain certain records for the entire organization, but just for subunits. For example, some hospital records are only kept by departments or floors; some highway patrol records are only kept at local supervisory levels, and some school district records are only kept at local schools. Without going to the specific subunits involved, it is impossible to obtain certain kinds of information, especially in a disaster that involves only some subunits and not all of an organization's units.

(2) Informality of record keeping.

Some organizations either keep only informal records or use an informal mechanism to get internal information. For example, one of the key law enforcement agencies in the area depended upon informal feedback to the head of the group with regard to certain activities of the organization. Some of this type of information can be obtained only by interviewing and may have questionable validity.

(3) Authorization of release of records.

Some local units or subunits of larger organizations do not have the authority to release records of local operations to anyone. For instance, the local telephone company, the local highway patrol post, and some local units of national corporations were limited in what information they could give out. Clearance of such local data would have to be obtained from the more distant larger organizational entity.

(4) Aggregation of data records.

Organizational data are frequently aggregated rather than individually compiled for units involved at particular times in the disaster. For example, much law enforcement data is spatial (i.e., including the disaster area in a larger region) or temporal (i.e., including disaster related days in figures compiled for a month or some other extended time period). Such information, once compiled in an aggregate way, can never be broken down into more relevant divisions for disaster research purposes.

(5) Delay in record keeping.

Some organizations wait for a periodic time (e.g., the end of the month or even a quarter) before attempting to compile certain kinds of information. In some cases, daily records put together by a local unit, are sent to a larger or regional unit which does not assemble the data until the specific time for such record keeping. Even when such information can be obtained for research purposes, there will be an inevitable delay.

(6) Discarding or destruction of informal records.

Some kinds of informal logs, chronologies, and minutes are generally discarded soon after the emergency period is over because the organizations involved have no need of them. Many of the key emergency groups operating at an EOC or emergency headquarters will informally record on blackboards, memos and so forth, all kinds of data which might be relevant to immediate organizational purposes, but will erase or destroy such information when there is a return to normal operations. Unless research personnel are on-the-scene during the emergency period, the possibility of getting copies of such information is lost forever.

(7) Costs in reassembling records.

Even when records are kept, it is often costly in time, money, or effort to reassemble them later after the event or situation under which they were assembled. For example, useful comparative data for a corresponding time period a year before the snowstorm was available in the files of such groups as the sheriff's department, United Appeal, the city manager's office, the local post office, the airport manager's office, etc., but were too "costly" for the organization to retrieve for research purposes. Many emergency records are relatively meaningless unless there is some base line set of data from a normal, routine time period against which they can be measured, but the organizations involved can not be expected to reassemble them for research purposes.

(8) Confidential nature of some records.

Records are classified as confidential for many reasons. In our study, most of the private corporations involved, ranging from mass media groups to transportation companies, felt that opening a number of their records might involve loss of normal competitive advantage. Such information can not be obtained unless the organizations involved see some advantage for themselves in releasing the documents involved.

(9) Record storage and control of records are often in different organizational units.

Persons and offices that compile and store records are not always the same individuals and units who have formal control of the records. There is often a very complex division of labor with regard to the compilation, storage, and control of organizational records, with ultimate access to them requiring a researcher to search for and obtain cooperation at different organizational levels from different officials. To some extent, this is a problem of ascertaining where and who in the bureaucratic structure needs to be approached to get information.

Our stress on problems should not suggest the impossibility of obtaining documentary data. Some of the difficulties and factors mentioned may have been peculiar to the specific locality studied, the time period of the field work, and the fact that the event was not a major community disaster. Ways of circumventing some of the difficulties are not impossible to conceive, particularly depending on the time, cost, and effort that might be worthwhile expending for the desired end result. Nevertheless, as DRC has already suggested in the past, the present study reconfirms that there are a range of problems involved in attempting to use records to build a pre-impact, trans-impact, and post-impact sequence of organizational activities in a community emergency.

A Few Concluding Observations

We would like to conclude with a few general observations in terms of the three general questions we used to guide our field work.

This study again confirms that only by an actual field study is it possible to establish if a community has or has not experienced a disaster. Objective indicators about disaster agents, press reports, and official statements about a locality can not be totally depended upon to arrive at an accurate assessment of the situation being examined. In terms of the three indicators just mentioned, there was a disaster in Columbia. But in terms of the perceptions of key organizational officials and the actual operations of their organizations, there was an inconvenience to normal community functioning in Columbia, but not a disaster. Elsewhere in the state the opposite may have been true.

An examination of the local city-county civil defense agency also reconfirmed the fact, stressed for a long time by DRC, that for a local group to be turned to at times of emergencies, it has to be integrated into normal community activities. This was the case in Columbia where civil defense is both salient and defined as legitimate. Thus, when this event occurred, the agency was able to take the initiative, move into action, and do what appears to be a rather good job of coordination along the limited lines required by the situation.

Finally, documentary data about an event such as the one studied can be obtained, but there will be gaps, missing links and dubious information in what can be collected using a record collecting procedure only. How universalistic and particularistic the specific problems observed are can only be ascertained through some more studies of the kind undertaken.

The field study in Columbia primarily reconfirmed what DRC already knew or suspected on the basis of earlier studies. Nevertheless, the research was of value. It provided additional substantive evidence for our beliefs, and it gave us further clues on how to seek more definitive answers in future studies dealing with the same kind of general questions we had in this field study.

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