PSYCHOLOGY

Big Disaster Problem

A traffic jam composed of people rushing into the disaster area is the major problem relief workers and police will face in coping with the affected community.

➤ IF DISASTER strikes suddenly at your city or community, the greatest problem will be posed by the tremendous numbers of people who throng to the scene, not the victims who want to get away.

How to handle the appalling traffic jam of those rushing into, not out of, the area will be the big headache of police and relief workers.

This is the conclusion of a special Committee on Disaster Studies of the National Academy of Sciences and the National Research Council. The committee made a careful study of a large number of tornadoes, floods, explosions and other calamities. (See p. 220.)

The finding contradicts a notion shared by many police and other control authorities that the major disaster problem will be the control of a panicky population. In actual fact, the investigators reveal, disaster victims are normally passive, cooperative and subject to control.

Even the horrible destruction and dangers of atomic attack cannot keep away the tremendous crowds of people who rush toward the scene of disaster.

Within 24 hours after the bombing of Hiroshima, the committee's report states, thousands of refugees came streaming back into the destroyed city.

"According to one of the USSBS (U. S. Strategic Bombing Survey) reports, road blocks had to be set up along all routes leading into the city because there were so many people who wanted to search for missing relatives or to inspect the damage."

Convergence of great numbers of people on the scene of a disaster is a virtually universal phenomenon, the report states. Those who return are people with, in general, five types of motives. There are the returnees who want to look for family or friends or to salvage what they can of their belongings. Then there are the anxious, the helpers, the simply curious and the exploiters.

Those who go to the scene of a disaster through curiosity, although often resented by the victims and relief workers, are generally not motivated simply by idle curiosity or by neurotic or "ghoulish glee" in witnessing destruction and suffering.

They seem to feel the need to understand the threat of such a catastrophe and its possible future danger to themselves. There is a need to direct and channel the activities of the curious rather than to block them off.

The danger of looting is mostly imaginary, the report indicates:

"In none of the peacetime disasters studied during recent years has there been a significantly large amount of looting or major theft."

The greatest need in handling disasters

is for speedy, accurate and specific information. It is principally the impossibility of learning the fate of loved ones in the disaster area that makes people rush to the spot or bombard it with telephone calls, telegrams or any other means of communication.

The report urges the organization in every community of a corps of information specialists who would have experience in news gathering and dissemination and who would be given special training in how to get the information out when all ordinary means of communication had broken down.

Ham radio operators, owners of loud speaker equipment and those who operate such communication facilities as radio stations, newspapers, telephone switchboards and printing establishments would be integrated into this corps and provided with couriers and clerks to help them.

Such information centers in localities not affected by the disaster could serve as clearing houses for collecting information and passing it on to relatives and friends.

Authors of the committee's report are Charles E. Fritz, research associate of the committee, and J. H. Mathewson of the University of California. Chairman of the committee is Dr. Carlyle F. Jacobsen of the State University of New York.

Science News Letter, October 5, 1957

RADIO

Saturday, Oct. 12, 1957, 1:30-1:45 p.m., EDT. "Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

James Kanegis, chief of the chemical section, Office of Technical Services, U. S. Department of Commerce, his daughter Brenda, 14, and son Gary, 11, will discuss "National Science Youth Month."

PHYSICS

Stellar Temperatures Reached in Laboratory

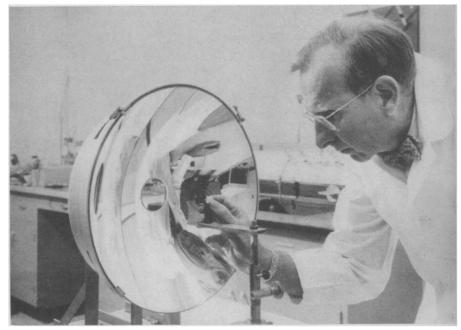
TEMPERATURES many times as high as the sun's surface have been reached momentarily in the laboratory, a U. S. Naval Research Laboratory scientist reports in *Physical Review* (Aug. 15.)

A changing magnetic field is used to keep the deuterium gas away from the walls of the shock tube. Dr. Alan C. Kolb produces the shock wave by a very high voltage discharge between two electrodes at one end of the T-shaped tube.

Shock waves, because of the stellar-like temperatures they generate, have been suggested as a method of triggering hydrogen bombs without exploding an atomic bomb—a possible avenue to the so-called "clean" bomb.

Since heat is the energy of atoms in motion, the violently agitated gas particles behind the shock front reach incredibly high temperatures for an instant. Dr. Kolb warns, however, that no "direct" measurement of the deuterium's temperature has yet been made. Based on the Rankine-Hugoniot scale, he has found temperatures as high as 700,000 degrees Kelvin.

Science News Letter, October 5, 1957



HOT SPOT—An arc image furnace developed by the National Carbon Company, Parma, Ohio, produces heat approaching that of the sun's surface. A sample is placed at the short focal point of a highly polished mirror, and heated to incandescence by concentrating the energy from a carbon arc in a standard motion picture projection lamp.