

Superglacial Lake Linda disappeared. Snails covered 13 blocks of Miami.

Dozens of whales unaccountably beach

## The Smithsonian Center for Short-Lived

by Jonathan Eberhart

When the Mt. Arenal volcano in Costa Rica erupted in a swath of death and destruction in the summer of 1968, government officials a mere 100 miles away in San Jose had such difficulty getting reports from the scene that they sent a radio message to Cambridge, Mass., to keep in touch with the disaster.

Jammed local phone lines during the Los Angeles earthquake of Feb. 9, 1971, prompted a radio station there to call across the country to Cambridge to find out what was going on.

A newspaper clipping mailed to Cambridge about the underwater eruption in late 1967 of Metis Shoal in the South Pacific which had raged for five weeks, observed only by airline pilots and passengers flying overhead despite its formation of a four-mile-long island of lava, promptly resulted in a scientist being rerouted to the site, two divers to collect submerged rock samples and a commercial airliner rerouted overhead every day for three weeks to take pictures.

Despite the numerous universities and other institutions in the Cambridge-Boston area, it is obviously not the world's only focus of scientific expertise. What it does have, however, is the hub of a unique science communications network called the Smithsonian Institution Center for Short-Lived Phenomena.

Rapid communications can make the difference between success and failure to many scientific observations. The aluminum 26 often present in fallen meteorites, for example, is such a fast-decaying isotope that a few days' delay in recovery can result in an almost worthless rock for laboratory analysis. The center's job is quite simply to col-

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lect reports of such time-critical happenings and relay them in a hurry to people who might want or need to know about them. The center's quick responses—and growing reputation for them, which attracts prompt alerts in the first place—have resulted in the recovery of at least 15 fresh-fallen meteorites.

At the time of Metis Shoal's eruption, the center was not even officially open. It had been conceived four years before by a group of scientists headed by Sidney Galler, then the Smithsonian Institution's assistant secretary for science, who were concerned that the excellent scientific coverage of the birth of the volcanic island of Surtsey might have suffered greatly had it not been near Iceland—an easy journey for researchers from both America and Europe.

The Smithsonian was a natural parent for such a facility, since it already had 13 separate bureaus conducting international activities. Its Astrophysical Observatory was an obvious location because of its elaborate global commu-

nications network, and on Jan. 2, 1968, the center began official operations under the direction of Robert Citron, former manager of an sao tracking station in Africa. Its facilities at the time, other than those shared with the observatory: one secretary and two phone lines.

Today it has a full-time staff of seven, two part-timers, an annual budget of about \$150,000, and, when operating synergistically with the observatory, an awesome communications system including a two-way radio station (KCW21), seven teletype circuits, nine phone lines and the use of the Defense Department's Autovon and Autodin systems for reaching U.S. Government installations anywhere in the world. Citron's eyes light up like a McLuhanesque communications addict as he shows how, without leaving his desk, he can punch up a six-way, multi-national conference call at a moment's notice.

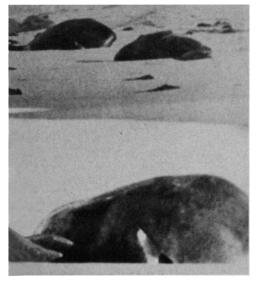
More than 3,000 observers, most of them scientists, in almost 150 countries are on the center's list of official cor-

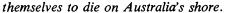
Students are among the center's newest correspondents, whose reports are condensed onto postcards and air mailed to network members and subscribers.

EVENT	35-73	ROCK ISLAND FERTILIZER & SAL	T SPILL	27 MARCH 1973		1594.
On Thursday, 22 March 1973, two barges sank and two				EVENT NOTIFICATION REPORT		
others became lodged on a navigational dam (lock & dam No.14) approximately 11 miles north of Rock Island, Illinois. This aggravated upstream flooding and polluted the Mississippi River with salt and fertilizer.  The incident occurred when a river boat pilot lost control of his barge tow in the swift current. As the tow boat eased out of the lock, the barge tow swung with the current.			TYPE OF EVENT	BIOLOGICAL		
			DATE OF OCCURRENCE	22 MARCH 1973		
			LOCATION OF EVENT	11 MILES NORTH		
			OF ROCK ISLAND, ILLINOIS, U.S.A.			
Four barges broke loose and slammed into the dam: the two				REPORTING SOURCE	RALPH M. E	ISEMAN
dam's gates.			HIGHLAND PARK HIGH SCHOOL, HIGHLAND PARK, ILLINOIS, U.S.A.			
	The barges created a partial dam in addition to the			SOURCE CONTACT	ARMY CORPS	
existing dam. This raised the river level one foot and backed up water at least 1 1/2 miles. The rise in the water level was expected to worsen flooding, particularly along the lowa shore. The Mississippi River was about 17 1/2 ft.			ENGINEERS, ROCK ISLAND DISTRICT,			
			ROCK ISLAND, ILLINOIS.			
	t Rock Island, or 2 1/2 ft. above flood stage.			This report is based on notifications received from the Center's correspondents and is disseminated for information purposes only. The watchsoman institution bears no responsibility for its accuracy.		
	Officials of the Army Corps of Engineers did not know			SMITHSONIAN INSTITUTION		
how much salt and fertilizer had escaped from the submerged barges. They felt that nothing could be done about the barges until the river level went down and the current			CENTER FOR SHORT-LIVED PHENOMENA			
			CAMBRIDGE, MASSACHUSETTS 02138			
became less strong.				UNITED STATES OF AMERICA		
				CABLE: SATÉLLITES NEW YORK TELEPHONE: (617)-864-7911		

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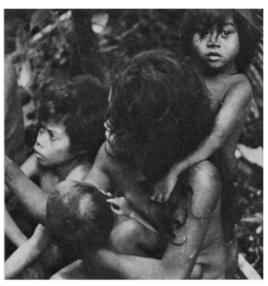
Science Service, Inc. is collaborating with JSTOR to digitize, preserve, and extend access to







Mt. Semeru erupted in Indonesia.



Tasaday were found in Philippines.

## phenomena: Spreading the word—right now!

respondents, and receive daily, air mail "event cards" in return for reporting on short-lived happenings in their parts of the world. (Four out of five events reported by the center have taken place outside the United States.) No organization of watchers can be everywhere at once, however, and reports often come from private citizens who simply happen to have heard of the center's existence. The New York Times also receives a daily perusal for events that might have been missed, and the center gets a check on radio reports of occurrences outside the United States through the Federal Government's Foreign Broadcast Intelligence Service. It also sends its event cards to other interested scientists and laymen who subscribe for \$100 a year (or \$15 a year for weekly packets), and will phone key researchers ahead of its own air mail cards when especially quick action is necessary.

The number of events reported by the center is approaching 600, and only a few have needed weeding out as insignificant or redundant. There have been numerous volcanic eruptions, earthquakes, fireballs, oil spills and meteorite falls. Strange population explosions have been reported of such creatures as snails in Florida, spiders in St. Louis, mice in Australia, locusts in Sudan, butterflies in Canada, army ants in Peru and starfish in the Pacific. The deaths of great numbers of birds, whales, reindeer, ducks and other animals have received the center's attention, as have many strange, individual events such as the mysterious draining of the whole of Lake Linda, Alaska, which sometimes receded as much as three or four inches per hour. Three times the center has even reported the discoveries of unknown primitive tribes, such as the nomadic, stone-age Tasaday Manubo of the Philippines, who had never tasted salt or sugar, had no knowledge of agriculture and were unaware that other societies of people even existed. Such tribes need prompt reporting to anthropologists, Citron points out, because the presence of outsiders can rapidly alter aspects of their

Carbonaceous chondrite meteorites fell by the ton near Allende, Mexico, many with unusual hardened, glassy drippings.

Center for Short-Lived Phenomena

In addition to its regular event correspondents, the center has this year begun to involve high school and college students in a plan called the National Environmental Network, which already has over 50,000 members in more than 650 schools. The goal, says Citron, is to have at least one student observer in every square degree of the United States, and preparations are under way to expand this network, too, around the world. Still another idea, for which the center is trying to get funds and authority, is a Marine Pollution Alert Network to cover the oceans, which would involve setting up facilities for real-time communication with ships at sea, as well as tightening international law to require complete reports within 24 hours of time, location, sea conditions and other factors about oil spills and other mishaps.

Citron feels, however, that the reporting of events is only the operational view of the center's over-all benefit, which is to get scientists, governments and other individuals and institutions working together, instead of finding out about what ought to be their own interests through belated reports and ineffectively directed communications. And the Smithsonian, he says, is probably the only organization in the world that could have done it.

The reason is the Smithsonian's unique private/governmental status. "Most private research organizations," he says, "are not operations oriented"—they are not prepared to look anywhere in the world at a moment's notice. Governments have the facilities but are slowed down by the burden of red tape and the requirements of diplomacy. The center, in its tiny Cambridge office, stands alone.