To the Government and People of Barbados
Sincere Condolences on the death of
Prime Minister JMGM Adams

From:

A DEATH IN THE FAMILY

On Tuesday 12th March, 1985, shortly after 3.00 p.m., the rumour began to circulate in Barbados that "Tom" was dead. There was the combination of the shock, which always comes with tragic news, and the disbelief which came with the "knowledge" that the much beloved and widely respected Prime Minister of Barbados could not, would not, "just die".

By 4.30 p.m., the telephone system in the island, perhaps the most modern in the Caribbean, was jammed. At 5.02 p.m., the country's three radio stations, interrupted their programming to announce that "John Michael Geoffrey Manningheim Adams, the second Prime Minister of Barbados died at his home shortly after 2.00 p.m. of a massive heart attack. Deputy Prime Minister Bernard St. John was sworn in as Prime Minister."

(SEE PAGE 3)

Countries Participating in the Project

1. ANGUILLA
2. ANTIGUA AND BARBUDA
3. THE BAHAMAS
4. BARBADOS
5. BELIZE
6. BERMUDA
7. BRITISH VIRGIN ISLANDS
8. CAYMAN ISLANDS
9. CUBA
10. DOMINICA
11. DOMINICAN REPUBLIC
12. FRENCH GUIANA
13. GRENADA
14. GUADELOUPE
15. GUYANA
16. HAITI
17. JAMAICA
18. MARTINIQUE
19. MONTSERRAT
20. NETHERLANDS ANTILLES
21. PUERTO RICO
22. ST. LUCIA
23. ST. KITTS/NEVIS
24. ST. VINCENT AND GRENADINES
25. SURINAME
26. TRINIDAD AND TOBAGO
27. TURKS AND CAICOS ISLANDS
28. US VIRGIN ISLANDS

Editor's Note:
With effect from this third issue, our publication will be titled "Caribbean Disaster Preparedness Newsletter," in keeping with the wishes of the Project Management Committee at its Seventh Meeting held in Antigua, 6 - 8 December, 1984.

Issues 1 and 2 were called "Caribbean Newsletter."
MANAGER’S COMMENT

MANAGEMENT IN THE CONTEXT OF THE PCDPPP

The Pan Caribbean Disaster Preparedness and Prevention Project is a multi-Agency project with a multi-disciplinary approach to disaster management.

This approach has many advantages, but also some attendant disadvantages, especially given the complex nature of the Caribbean.

The English-speaking Caribbean alone has 13 independent nations and three colonies with a total population of some five million, and population per territory ranging from 6,000 to 2.5 million.

Add to these the Spanish, French, and Dutch-speaking countries participating in the Project, and one is faced with almost kaleidoscopic differences in social, cultural, and political characteristics, which make coordination challenging and at times difficult. From the funding and execution angle of the project, there are seven major agencies involved. The funding agencies, EEC/EDF, USAID/OFDA and CIDA, and the executing agencies, CARICOM, UNDRO, PAHO/WHO, and LORCS.

Agencies apply their rules and regulations as flexibly as possible, to facilitate the functioning of the project. Nevertheless this has meant delegation of authority to Project staff by Executing Agencies, coming gradually and in varying degrees.

In the majority of cases, the agencies’ format requires that they deal directly with the expert they have hired for the project, and who is technically supervised by them.

What then, does management of the Project mean in PCDPPP terms? It means a variety and a combination of things. For example, it means ...

a. Managing the headquarters office which provides services to all technical components of the Project. This, in reality, means managing the resources provided for this purpose to CARICOM by the EEC.

b. Coordination of in-country activities to prevent or limit wasteful utilisation of Project resources, duplication, and confusion. The immense pressures on the daily work schedule of national officials of small states by visiting experts are a well known negative side-effect of development cooperation.

c. Monitoring to ensure an on-going dialogue with the governments, using the proper channels of communication, bearing in mind their sovereignty, and having due regard for, and empathy with, national sensitivities. Not all technical staff would be aware of this aspect of cooperation.

Although cooperation could easily become a matter that is purely dependent on the willingness of the many partners in this venture to have their contributions coordinated, their willingness to cooperate is a tribute to their concern for the economic and social well-being of the Caribbean.

All these, and other factors, make the management of this unique experiment in inter-agency, and inter-country collaboration, challenging and stimulating.

The abovementioned experience with the administration of the Project, which CARICOM gained during the past two years will prove useful in selecting their full-time Project Manager, this is to take place shortly as the present arrangement between CARICOM and PAHO expires.

EDITORIAL

THE MESSAGE AND THE MESSENGER

A landmark in the socio-economic evolution of countries in the Caribbean, has been the realisation that the public needs to be made aware of developments, as they occur, but ideally before they occur. As a result, public awareness campaigns are now invariably a part of our development projects.

So far, the brunt of the public awareness campaigns has been borne by the communications media, (radio, television, newspapers, posters etc.), and the main resource people have been the media practitioners themselves.

While this has brought positive results, one wonders whether we are not excluding, or at least under-utilising, valuable media, easily accessible and available to us, for information gathering and dissemination.

We suggest that the time has come to make much greater use of our extension workers, as messengers, in the drive toward greater public awareness (which should include decision-maker awareness). Public Health Personnel, District Medical Officers, Agriculture Extension Officers, Nurses, Community Development Workers, Teachers, Police Personnel etc., each have a constituency, and a degree of credibility in that constituency, which makes them appropriate messengers in many communities, and ideal support for the mass media component.

In the Pan Caribbean Disaster Preparedness and Prevention Project participating countries have already begun to utilise some of these media by sensitising them. An example of this is the workshop held recently for teachers in Dominica to help them recognise signs indicating the need for maintenance in school buildings before it becomes acute.

The enlisting of these potential “multiplicadores” could usher in a new era in public awareness, concern, and action in the Caribbean.

WORKSHOP ON DISPREP AND EMERGENCY MANAGEMENT

A five day workshop on Disaster Preparedness and Emergency Management was held from 25th February to 3rd March, 1985 in St. Vincent.

Organised by the Government of St. Vincent and the Grenadines with the assistance of the PCDPPP, the workshop covered the vulnerability of the state to the threat of man made and natural disasters including hurricanes, and volcanic eruptions. It also examined the 1983 Hurricane Plan.

Among the workshop’s objectives were to introduce senior management personnel to emergency management, to prepare government and statutory board officials and private sector managers to function during a disaster, and to provide guidance to participants in the formulation of emergency plans.
A DEATH IN THE FAMILY

Minister by acting Governor General Sir Arnott Cato. The country is now officially beginning a week of mourning.

The rest of the story has been told and retold by word-of-mouth, as well as by national, regional and international media. It will take the Caribbean a long time to adjust to Tom Adams’ sudden departure from the political scene.

From the perspective of the Pan-Caribbean Disaster Preparedness and Prevention Project, his death is a personal loss. The late Prime Minister of Barbados was, to this Project, the Barbados Minister responsible for Disaster Preparedness. It was under his portfolio that the Central Emergency Relief Organisation (CERO) fell, and within the same physical location as his office, that the CERO secretariat is found.

In November 1984, when flash floods, and torrential rains caused widespread damage to the Northern and Eastern Parishes of Barbados, the late Prime Minister moved swiftly. He visited the affected areas with the rest of the Cabinet and relief teams, secured the approval of Parliament for $807,000, in relief funds and appointed a Minister of State to oversee the relief operations.

But apart from that type of operation which required a high profile, the late Prime Minister has, quietly and unobtrusively, yet solidly, supported the concept of approaching the matter of disaster preparedness and prevention on a regional basis. More specifically, he displayed the political will, along with other Caribbean leaders, to make the Pan Caribbean Disaster Preparedness and Prevention Project a reality.

The Management Committee, all participating Governments, Project Manager, and staff of the project, express sincere condolences to the Governor-General, the Government and People of Barbados, and to the late Chairman and various committees of the Central Emergency Relief Organisation, on the loss of a capable and caring leader. For our part, we have experienced a death in the family.

EMERGENCY COMMUNICATIONS EQUIPMENT FOR TCI

by Hartley Coalbrooke

The Turks and Caicos Islands, one of the member countries of the PCDPPP has begun receiving emergency telecommunications equipment as part of its disaster preparedness effort, and is looking forward to having it installed before 1 June, the official start of the hurricane season.

The equipment, costing approximately U.S. $10,000 will greatly enhance the communications capabilities of the Turks and Caicos Islands, in disaster situations.

Previously, the TCI relied on the commercial communications networks, the communication networks of the Royal Turks and Caicos Police Force, and the local Ham Radio Association, in times of national emergency. Negotiations between the Government and the PCDPPP began in July 1982, and agreements were signed by both parties.

The TCI government expresses its gratitude to the PCDPPP, the Canadian International Development Agency (CIDA), and others who contributed to the procurement and delivery of this equipment.

Note

Hartley Coalbrooke is an officer in the Office of the Chief Minister, Grand Turk, Turks and Caicos Islands, W.I.

Editor’s Note:

Many countries in the region have begun to receive consignments of communications equipment provided, through the Project, by CIDA. This equipment is vital to the regional network of emergency communications for national emergencies and disasters.

NATIONAL DISPREP WEEK

The Government of Antigua and Barbuda has accelerated its public information campaign in support of its disaster preparedness activities.

From early February, a series of radio and newspaper articles and television programmes have been dealing with issues relevant to disaster preparedness in Antigua and Barbuda, as well as the Eastern Caribbean.

This public awareness blitz reaches its climax during the week of May 26, when the island observes Disaster Preparedness Week. National Disaster Coordinator, Mrs. Cornelia Michael, who is spearheading the programme says activities planned for the week include a simulation exercise for Ham and Citizens’ Band Radio operators, instruction on the conduct and activities of Red Cross Societies, and the launching of the Emergency Operations Centre.

The Island’s schools have been asked to develop a slogan and theme for the week.

TRIBUTE TO TOM ADAMS

by Algy Symmonds

Chairman CERO, Barbados

Mr. Adams was very supportive of the work of CERO and insistent that those involved in disaster preparedness were exposed to proper training and experience. In his pragmatic way he stressed that it was impossible to build-up resources to meet every eventuality, and realises that a small organisation needed to be selective.

He supported CERO’s policy of encouraging public awareness of the need for preparedness, and was always interested in knowing that the organisation was in a state of readiness. He left the Secretariat to get on with the job, only requiring that he be advised of problems that arose. He was always congratulatory when a job was well done.
FOCUS ON PREVENTION

BUILDING COSTS AND INSURANCE

(This article is based on a presentation by Prevention Advisor Alwyn Wason at the Sixth Caribbean Insurance Conference held recently in Jamaica.)

Records dating back to the fifteenth century show that the Caribbean has been struck by a series of natural disasters - earthquakes, hurricanes, and floods, and other equally devastating occurrences, such as cholera, epidemics, and major fires.

After a major disaster, attempts are usually made to introduce legislation designed to mitigate the effects of similar occurrences, and the very detailed building laws in Jamaica resulted from the major earthquake in 1907.

In 1979 and 1980, the Caribbean suffered major damage from hurricanes David, Frederick, and Allen. In 1982, CARICOM, with financial assistance of USAID/OFDA, the Canadian Development Bank and the Council of Caribbean Engineering Organizations, embarked on the development of a Caribbean Uniform Building Code (CUBIC) which is due to be published in 1985. This code, and the Bahamas Building Code which was published about ten years ago, will form the basis for the appropriate design of structures in the Region, and with adequate enforcement, will assist in mitigating damage from the natural disasters of hurricanes and earthquakes.

Building codes are tools for design of structures and provide design principles to be followed. There is, however, a need for the development of a companion document, based on the design principles provided in the Codes, which can be used by the small builders as building guidelines. The PCPPP has therefore initiated a series of workshops for building professionals in the Eastern Caribbean, designed specifically to provide the information needed for the development of building guidelines, which will be responsive to the needs of the countries.

The building, if appropriately designed, can incorporate the structural requirements for earthquake and hurricane resistance at minimum extra cost.

A building design team conscious of the need to produce buildings which are economical in cost and structurally resistant to the natural hazards of hurricanes and earthquakes, can usually provide a building with the optimum structural shape, on a site which would not lead to problems of landslides, flooding, storm surge, liquefaction of the soils and the like.

COSTS

The question asked most frequently about the enforcement of building codes is "How much extra will a building cost if the Building Code is enforced?" Studies of costs of some building structures in Trinidad designed in accordance with various code requirements show construction cost increases varying from 1.8% to 10% for upgrading the design of the structure to accommodate seismic forces. Other studies of model dwellings in the United States show increases in cost of 0.25% to 2.0% over the costs of houses not designed to the latest code requirements.

However, when hurricane forces are being considered, increases in the cost of a structure of up to 20% must be expected if a standard steel framed structure (e.g. a factory shell), designed to withstand forces generated by a storm of about 60 mph winds, is upgraded to withstand forces generated by hurricanes of 120 mph. This is so, as the wind forces to be borne by the structure vary with the wind speed. Lightweight structures would therefore require significantly larger bases, heavier roof sheets, deeper structural sections and more attention to joining details.

The consideration of increases in costs of buildings also includes other costs such as:-

- cost of life
- cost of damage
- losses through a facility being out of service.

The cost of life, however quantified, must be a factor in evaluating the cost of measures needed to provide safe structures.

The cost of life is perhaps not easy to quantify. One study calculates that in 1973 the cost of life in the USA was $650,000 based on the formula:

Cost of life = Value of everything in a country: Number of persons in the country

The cost of life for the Commonwealth Caribbean may be about 10% of the cost of $650,000 or $65,000 based on a comparison of the per capita GNP of the USA and the average per capita GNP of the Commonwealth Caribbean. It may be argued that the average Caribbean community should be willing to spend up to $65,000 per person to avert catastrophe, and that this expenditure if applied to increasing the resistance of structures to natural or man-made hazards can be justified.

The cost of damage to property by a hurricane, earthquake, fire or other occurrence, is relatively easy to quantify and insurance claims for such damage are common. However, it should be of advantage to business enterprises when constructing new buildings to examine the extra costs of hurricane and earthquake resistant construction in relation to the capitalized insurance costs applicable to the class of building being constructed.

The cost of losses through the non-use of a facility may be difficult to quantify. However, a cost-conscious entrepreneur, examining all of the factors...
DOMINICA - TOWARDS MITIGATION

On Sunday, 24th March, 1985, an informal group of just over 30, assembled in one of the classrooms of the Portsmouth Government School in the North of Dominica.

This was not, as might be assumed, a Sunday School group, in that predominantly Roman Catholic country, it was a group of small building contractors, gathered for the second of nine workshops organised by the Economic Development Unit of the Government of Dominica, with funding and technical assistance from the PCDPPP.

This series of workshops is based on the investigations and recommendations of the Project Prevention Advisor Alwyn Wason, and is designed to upgrade the skills of these small builders, who are largely responsible for the construction of houses for lower income groups. The emphasis is on incorporation of relatively inexpensive techniques such as the use of metal strips, to more firmly anchor the roof to the wall, the walls to the floor, and the floor to the foundation, of buildings they construct. The training also emphasises structural maintenance, as well as the normal maintenance such as painting.

The participants, all volunteers, attended in response to advertisements and notices on radio, television, in newspapers, and churches. Some of the announcements on radio were made in Creole, the primary, though not the official, language in Dominica.

The tremendous interest displayed by the participants in this type of training, can perhaps be attributed to the widespread destruction of buildings and loss of life, suffered in Dominica, as a result of hurricanes in 1979 and 1980.

A similar series of workshops will be planned for St. Lucia later in the year.

which may result from a major collapse, should be interested in outlaying a little more capital against danger from collapse, rather than attempting to offset losses through increased insurance coverage.

It is suggested that:

(a) Insurance companies recognize that the total cost of restoration from a major natural disaster will be significantly higher than the cost of mitigation and may be higher than the reserves accumulated by Insurance Companies from annual premiums received, and

(b) Lower insurance premiums be offered for buildings conforming to the Caribbean Uniform Building Code or to the recognized Codes appropriate to the region.
SATELLITE TEACHING FOR DISASTERS

Some 58 Medical doctors, Public Health Nurses, Hospital Nurses, and Public Health Inspectors from six countries in the Caribbean have been nominated to participate in a 12-week course in Emergency Health Management after Natural Disasters.

The course which began on 20th March is coordinated by Dr. Winsome Segree, Lecturer in the Department of Social and Preventive Medicine, with the assistance of Mr. Carlton James, Training Consultant to the Project, and is funded by the PCDPPP. The unique aspect of this training is that it is being conducted via satellite, utilising the University of the West Indies Distance Teaching Experiment (UWIDITE) at Mona Jamaica.

Each week, the participants meet at the University campuses or Centres in Barbados, Trinidad, Jamaica, Dominica, St. Lucia, and Antigua for 1½ hours, every Wednesday morning for the sessions from 10.30 a.m. - 12.00 noon (Jamaica time), 11.30 a.m. - 1.00 p.m. (in the other countries). Subject areas to be covered include "The Effects of Disaster on Health", "Management of Mass Casualties" Epidemiologic Surveillance and Disease Control," and "Management of Health Relief supplies."

The course material was developed by the University of Wisconsin for PAHO. At the end of the course participants should be able to demonstrate a knowledge of Emergency Health Management after natural disasters, and be able to participate in the planning and implementation of national disaster plans.

EARTHQUAKE IN THE EASTERN CARIBBEAN

An earthquake, measuring 6.6 on the Richter scale was felt in the Leeward Islands on Saturday 16th March.

Dr. John Shepherd of the Seismic Research Unit (SRU) of the University of the West Indies said the quake was recorded at 10.54 a.m., and located at 17.02°N, 62.39°W, or just to the north of the island of Redonda. The SRU also confirmed that this was the largest earthquake experienced in the region since 10th October, 1974.

The earthquake was felt very strongly in Antigua, Guadeloupe, Montserrat, St. Kitts and Nevis. Within 24 hours afterwards, over 100 aftershocks were felt. Up to 31st March, the aftershocks continued even though at a declining rate. This, according to the SRU, follows the normal pattern of earthquakes in the Leeward Islands, in which there is an earthquake every 10 to 15 years.

Slow-scan television transmission. Image of course coordinator Dr. Segree at opening of the course, transmitted simultaneously to five other sites in the region.
IN-HOUSE TRAINING

“Improvisation is a vital element in the effective practice of First Aid in the Caribbean. The tools used to improvise could be as basic as towels and sanitary napkins.”

This is the view of Ms. Audrey Mullings, First Aid Advisor with the PCDPPP, expressed during “Introduction to First Aid-Lesson I,” of an Emergency First Aid Course for Project staff. The course, held March 5-11, 1985, at Project headquarters in Antigua, covered, in addition to basic introduction, unconsciousness, artificial respiration, bleeding and shock, and First Aid at road accidents.

First Aiders are becoming vital to the healing process in the Caribbean, as a complement to the established medical services, and the Project has been assisting Governments and Red Cross Societies in the region with this type of training.

Project First Aid Advisor Audrey Mullings demonstrating the handling of an “accident victim.”

MCM VIII

The Management Committee of the PCDPPP holds its eighth meeting in Santo Domingo, Dominican Republic, 29th-31st May, 1985.

These meetings, held twice a year, provide a forum for participating Governments, funding and executing agencies, to assess the work of the project and approve work programmes for the period leading up to the next meeting.

The permanent member countries on the Committee are Cuba, Dominican Republic, and Haiti. Other countries serve on a rotating basis.

National Disaster Coordinator Sr. Alfonso Julia Mera, is spearheading the national coordination of the meeting in the Dominican Republic.
**LIST OF ACRONYMS**

**PAN CARIBBEAN DISASTER PREPAREDNESS AND PREVENTION PROJECT**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>CARICOM</td>
<td>Caribbean Community and Common Market</td>
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<td>CIDA</td>
<td>Canadian International Development Agency</td>
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<td>ECCM</td>
<td>East Caribbean Common Market (now OECS)</td>
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<td>ECLAC</td>
<td>Economic Commission for Latin America and the Caribbean</td>
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<td>EDF</td>
<td>European Development Fund</td>
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<td>EEC</td>
<td>European Economic Community</td>
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<td>LORCS</td>
<td>League of Red Cross Societies</td>
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<tr>
<td>OECS</td>
<td>Organization of East Caribbean States (former ECCM)</td>
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<td>PAHO WHO</td>
<td>Pan American Health Organization World Health Organization</td>
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<tr>
<td>PCDPPP</td>
<td>Pan Caribbean Disaster Preparedness and Prevention Project</td>
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<td>SIDA</td>
<td>Swedish International Development Agency</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNDRO</td>
<td>United Nations Disaster Relief Office</td>
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<td>USAID OFDA</td>
<td>United States Agency for International Development Office of Foreign Disaster Assistance</td>
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<td>BDD</td>
<td>British Development Division in the Caribbean</td>
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<td>ITU</td>
<td>International Telecommunication Union</td>
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<td>IMO</td>
<td>International Maritime Organization</td>
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**HURRICANE INFO**

Hurricanes are tropical storms in which winds reach constant speeds of 74 miles per hour or more, and blow in a large spiral around a relatively calm centre - the eye of the hurricane. Every year, these violent storms bring destruction to coastlines and islands in their erratic path.

Stated very simply, hurricanes are giant whirl-winds in which air moves in a large tightening spiral around a center of extreme low pressure, reaching maximum velocity in a circular band extending outward 20 or 30 miles from the rim of the eye. This circulation is counterclockwise in the Northern Hemisphere, and clockwise in the Southern Hemisphere. Near the centre, hurricane winds may gust to more than 200 miles per hour. The entire storm dominates the ocean surface and lower atmosphere over tens of thousands of square miles.

The storms move forward very slowly in the tropics, and may remain almost stationary for short periods of time. The initial forward speed is usually 15 miles per hour or less. Then, as the hurricane moves farther from the Equator, its forward speed tends to increase; at middle latitudes it may exceed 50 miles per hour in extreme cases.

The great storms are driven by the heat released by condensing water vapor, and by external mechanical forces. Once cut off from the warm ocean, the storm begins to die, starved for water and heat energy, and dragged apart by friction as it moves over the land.

**PAHO DISASTER RESPONSE TEAM**

The PAHO multi-disciplinary team available for rapid response to disasters in the region will now be known as the PAHO Disaster Response Team.

Formerly known as the PAHO Front Line Team, the group comprises a leader, an epidemiologist, a Sanitary Engineer, Nutritionist, and Nursing Advisor.

It was found that the name more adequately reflects the function of the team.