

Development of EM. Operations Plan
For the Government of Jamaica 1979
Background Notes

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DEVELOPMENT OF ENV. OPERATIONS PLAN
FOR THE GOVT OF JAMAICA 1979
BACKGROUND NOTES BY F.C. CUNY

FOR OFFICE USE ONLY

STEPS FOR DEVELOPING A DISASTER PROGRAM

Phase I Preplanning

- Step 1. Determine which phases of a disaster to work in (ex. Mitigation, Preparedness, Emergency operations, Recovery, Reconstruction).
- Step 2. Determine which ministry of office to place NEC in.
- Step 3. Establish goals and objectives.
- Step 4. Establish policies to shape methods for reaching objectives.
- Step 5. Identify Action Plans required.
- Step 6. Identify data requirements necessary to develop Action Plans
- Step 7. Identify staff needs for developing plans
- Step 8. Develop Preliminary budget.
- Step 9. Establish Budget and Analysis Routines
- Step 10. Establish Schedule.

Phase II Development of Preparedness Plans

- Step 1. Hire planning staff and coordinator.
- Step 2. Hire consultants
- Step 3. Assign work tasks.
- Step 4. Acquire data (including existing disaster plans in each ministry or department).
- Step 5. Identify problem areas (geographic and inter-ministerial).
- Step 6. Establish preliminary coordination links between ministries.
- Step 7. Prepare preliminary Action Plans.
- Step 8. Decide on format for presentation (Workbook, Checklists, etc.).
- Step 9. Send preliminary plans to ministries for review and comment.
- Step 10. Identify mitigation actions that can be taken as a part of normal activities.

Step 11. Determine staff requirements.

Step 12. Develop memos of understanding between ministries and departments.

Step 13. Determine legislation needs.

Step 14. Formalize Action Plans.

Step 15. Assemble total Preparedness Program.

Step 16. Present to Government and public.

Phase III Development of Emergency Response

Phase IV Development of Recovery Plan

HURRICANE PREPAREDNESS MEASURES THAT
SHOULD BE TAKEN DURING A HURRICANE WATCH
BY GOVERNMENT

- Activate Emergency Committees (Issue Amber Alert)
- Government officials who hold key positions should be given half day's leave to prepare their families, then recalled.
- Emergency work groups should be organized in each critical Govt. Ministry
- Emergency operations centres should be established in each critical Govt. Ministry and linked to the central EOC
- Back-up communications should be established in the event phone lines and electricity are cut (Messengers)
- Those preparedness and emergency plans that exist should be reviewed, updated, and copies forwarded to the EOC along with lists of persons on duty assignments for each Ministry.
- EOC should check stores of maps and charts, especially those of lifelines
- Shelter managers should be alerted to possible call-up
- Operation supplies and funds for EOC should be acquired
- Plans for vulnerable areas should be developed or reviewed, especially evacuation plans
- Check on status and location of rescue equipment
- Review evacuation routes with highway/roads department for latest blockages.
- *Alert media and clarify terminology*

DISASTER PREPAREDNESS ACTIONS THAT SHOULD BE
TAKEN DURING A HURRICANE WARNING BY GOVERNMENT

E O C

- Issue emergency preparedness order (Red Alert)
- Call and confirm that all departments are initiating preparedness action plans (remember redundancy rule)
- Issue official ID cards, badges, etc.
- Establish open line communications links
- Open shelters
- commence evacuation of vulnerable areas
- Order establishment of evacuation routes and position equipment to reopen in case of blockings.

ACTIONS BY GOVERNMENT MINISTRIES: A CHECKLIST

1. Military

- (a) Cancel and issue leaves as appropriate
- (b) Secure and protect critical equipment
- (c) Move aircraft and light boats to safe locations and secure
- (d) Fuel vehicles.

2. Water Departments

- (a) Lower water levels in reservoirs to accommodate rapid rise in water levels w/o flooding
- (b) Position equipment in critical locations to repair or close broken mains
- (c) Sand bag and protect critical facilities, especially near purification or treatment centres.
- (d) Fuel Vehicles .

3. Sanitation Department

- (a) Position equipment in critical locations to repair or close broken lines.
- (b) Sand bag and protect critical facilities, especially in low flying or vulnerable areas.
- (c) Distribute data on water purification methods to phase on vulnerable areas.
- (d) Distribute water test equipment at key locations and review testing methods.
- (e) Fuel Vehicles

4. Electric Company (JPS)

- (a) Position Equipment in critical locations for repairs
- (b) Review possible shut down locations
- (c) Sand Bag and protect critical facilities
- (d) Check casings of transformers and water proof where needed.
- (e) Store sets of maps in safe locations.
- (f) Fuel Vehicles

5. Telecommunications

- (a) Activate emergency team and switchboards
- (b) Position emergency equipment along principal lines or near critical facilities
- (c) Prepare to re-establish com links to critical authorities on a priority basis (with back-ups)
- (d) Protect key facilities, especially central switchboard operations.
- (e) Check casings of critical equipment and waterproof where necessary.
- (f) Fuel vehicles.

6. roads and Highway

- (a) Position equipment to clear backlogs of critical routes, especially around hospitals and lifelines, and near vulnerable settlements.
- (b) Mark evacuation routes, and position signs for identification of emergency routes for post disaster use.
- (c) Issue orders for disaster assessment survey teams to check routes bridges, culverts, etc. immediately following the hurricane.
- (d) Position sandbags in critical locations
- (e) Move equipment stored in low lying or flood prone areas to high ground
- (f) Fuel vehicles

7. Public Works:

- A. Position equipment near vulnerable areas and critical facilities.
- B. Position sand bags near flood-prone areas.
- C. Issue orders for post-disaster assessment teams.
- D. Fuel vehicles.

8. Schools:

- A. Satten down buildings.
- B. Move books and supplies to shelves, and cover with plastic.
- C. Shut off electricity.
- D. Remove lights or other high fixtures.
- E. Stack dishes and chairs near windows.
- F. In schools used as shelters, store and protect relief supplies.

9. Public Health:

- A. Activate emergency teams.
- B. Check stocks of materials and equipment.
- C. Issue health hazard warnings to vulnerable and high risk areas.
- D. Issue instructions to emergency teams and where possible, pre-position supplies.
- E. Establish epidemiological procedures.
- F. Fuel vehicles.
- G. Prepare facilities and procedures for processing of deceased.

10. Hospitals:

- A. Activate emergency plans.
- B. Check back-up generators and check fuel supplies.
- C. Prepare triage teams.
- D. Protect supplies (medicines with dual protection).

11. Police:

- A. Activate emergency plan.
- B. Review priority areas where control problems may be expected and plan accordingly.
- C. Issue evacuation orders as required (remember redundancy factor).
- D. With approval of courts, prepare to release minor offenders held in vulnerable areas and transfer others to safer locations.
- E. Among trustees, organize body removal squads.
- F. Fuel vehicles.

12. Miscellaneous:

A. Airports:

- 1. Fly all aircraft to safest airports.
- 2. Secure all aircraft to ground.
- 3. Place sand bags inside airplanes to help weigh them down.
- 4. Place sand bags around airplanes to shelter them.
- 5. Open spoilers on all aircraft (or place boards on wings weighted with sand bags to create spoilers).
- 6. Rig nets over planes in hangars to protect from falling debris.
- 7. Protect fuel supplies.
- 8. Stock fuels and oils.
- 9. Remove ceiling fixtures in hangars.
- 10. Take rotors off helicopters unless they can be folded.

B. Railroads:

1. Move rolling stock to protected and/or high locations.
2. Position locomotives and rolling maintenance and emergency equipment in critical locations.
3. Organize track and trestle survey and clearance parties and signal repair crews, and assign to critical locations.
4. Set brakes on all standing rolling stock.
5. Fuel all locomotives and other vehicles.

C. Tips for Stores and Businesses:

1. Remove ceiling fixtures.
2. Remove lights, especially fluorescent lights.
3. Move perishable stocks to middle shelves; canned goods and non-perishables to upper shelves.
4. Cover upper shelves and stocks near windows with plastic.
5. Store records in a safe, high location and protect with plastic.
6. If business is located in a vulnerable area, batten and secure building. Then move critical equipment and records to a safer location.

Problem ID

Warning →

Staff
MET office,
police
Army,
API
JBC / RSR / MEDin
LECC

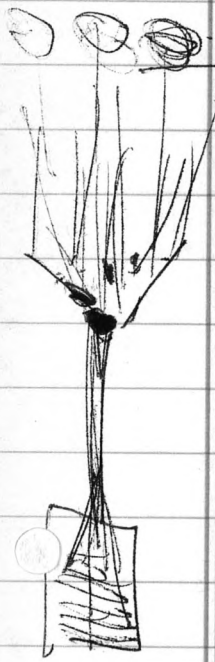
critical facilities

staff
PWD
Water Comm.
JPS
Telephone services
~~sub~~ Hospitals
Police

Evac.

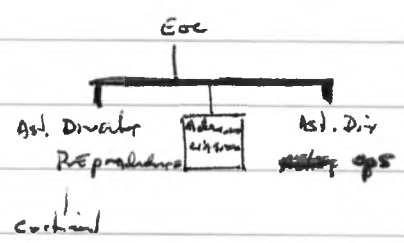
staff

1. Staff requirements for Em. operations Group & T.O.
~~XXXXXXXXXXXX~~
2. Staff " " Liaison w/ ministries in prep. of return plans
3. Info. Needs
4. Budget (T.O.)



1. EOC Director
2. Asst. "
3. ~~Asst.~~ Asst. Director for Preparedness ~~Asst~~
4. - Critical facilities officer
5. Warning ~~Evacuation Surge warning~~ ~~Evac.~~ officer
Flts & flood warning
6. EVAC. officer

7. Asst. Director for Em. operations
8. Disaster ASSESSMENT
9. Search & Rescue
10. Relief operations.
11. Liaison w/ Govt -
12. Communications -
13. Public Relations & Awareness
14. Secretary
15. Typists
16. Lawyers
17. Map Plotter & training aids specialist
18. Transport - Comp.



Food later
Incls, budgeting

Setup office

1. Program structural assessment form: include data on control & admin.
\$65 WEEK \$20 } 8:30 at EOC
Orientation on Monday 10th }
2. Set up office - lanterns, fuel
3. ID ACTION PLANS
3. Warning & Public Awareness - co-ordination with NET office
NEED memo

INFO. NEEDS

1. Map & list of communities that are in ~~best~~ radio shadow area
2. Critical facilities

Govt Response - ~~Meeting~~ ^{Inter Ministerial Dist. Prop. Comm. Meeting}

Hurricane alert issued 8:15 PM local 30 Aug.

1. SEE Ms. Jones
2. Flooding program to stop on ^{Sept.} 15th } permanent

Humans until 8:00 AM 31 Aug. winds pick up 10:30 31 Aug.

Issues

1. where to resettle people (Brownsite compounds)
 2. How, MLCG will repair old houses & build new houses. JOE AMBIT
- CERC to stay in operation - Nov. - moving to
Glen Knight lands rehab. task force -

~~the~~ Natl. Hsg. Trust

Agriculture - Mrs. Joan Robinson contact re: govt

Next CERC meeting 13th ~~at 3:00~~ 3:00

Meeting concerned w/ existing legislation

David 16 N. 66 W

**** Important point - warning may occur on a weekend. the 48/24 hr. system used by NOAA may catch ~~people~~ govt people, others when govt shops, etc. are not in operation.

Priorities of GOC
During Hurricane David
(48 hr.) watch.

RESCUE

- Evacuation P
- organizational structure & mission P
- Supply P
- Transportation
- Communications P
- Warning P
- Public Health

Medical.

- Shelters P+P
- Intergovernmental Liaison P
- Information P
- Security P
- Authorities P

Disaster Assessment

Handling of Deceased

Frank
Juni,

McDonald. Warning

Frank
"

org. structure & mission

Information

Evac. Plans & info.

Govt advisories for specific groups

Shelters & managers

official authorities

Security

Evacuation

Liaison w/ local govt

Transportation

Disaster Assessment

Public Health → Handling of dead

Rescue

Transportation



INTERTECT

Survey Form: Problem Identification

(JCC & EOC)

PROBLEM DESCRIPTION:

All relief items distributed at one point. This created welfare centers and it is now difficult to distribute them.

POSSIBLE SOLUTIONS:

1. Disband centers and distribute relief directly to families.
- 2.

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Distribute on scattered sites.

Name:

Title:

Organization:

Address:

Date:



Survey Form: Problem Identification

(EOC)

INTERTECT

PROBLEM DESCRIPTION:

Lack of direct co-ordination with ^{all} ministries. While a representative of each sits on EOC, there needs to be a person who is responsible for co-ordinating action plans and co-ordinating response

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



Survey Form: Problem Identification

INTERTEC

(EOC)

PROBLEM DESCRIPTION:

Lack of clear cut lines of authority and responsibility within EOC

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



Survey Form: Problem Identification

INTERTECT

(EOC)

PROBLEM DESCRIPTION: No action plans. Action plans bring together various departments for co-ordinated action. Ex. Evacuation plan, storm surge warning plan, ~~the~~ protection of critical facilities, warning plan, security plan, ~~Response~~ equipment positioning plan. Post disaster search + rescue, ~~disaster~~ disaster assessment, relief operations.

POSSIBLE SOLUTIONS:

1. Develop Action Plans

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



Survey Form: Problem Identification

INTERTECT

EOC (+ JCC)

PROBLEM DESCRIPTION: Lack of data on critical facilities, especially maps showing location, etc. which are in the vulnerable areas and must be protected.

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



Survey Form: Problem Identification

INTERTECT

EOC

PROBLEM DESCRIPTION: Lack of clarity on role of EOC in various disaster phases (mitigation, preparedness, em. response, recovery). I.E. what is function.

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



Survey Form: Problem Identification

INTERTECT

EOC

PROBLEM DESCRIPTION: ~~lack of plan for developing a~~

If functions include mitigation + reconstruction, EOC is in wrong ministry.

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



INTERTECT

Survey Form: Problem Identification

EOC / JCC

PROBLEM DESCRIPTION: Lack of awareness of what a cyclone can do. ~~Survey~~
88

POSSIBLE SOLUTIONS:

Visit Dominica now. Ask JCC / USAID to set it up

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

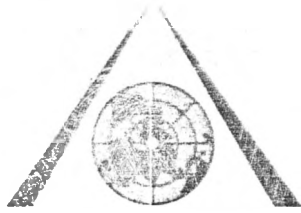
Name:

Title:

Organization:

Address:

Date:



Survey Form: Problem Identification

INTERTECT

EOC

PROBLEM DESCRIPTION: *MET office co-ordination needs to be clarified*

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



Survey Form: Problem Identification

INTERTECT

EOC

PROBLEM DESCRIPTION: *NEED official NEWS co-ordinator for EOC*

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



INTERTECT

Survey Form: Problem Identification

EOC (JCC)
NET

PROBLEM DESCRIPTION:

Classification of hurricanes warning/watch ~~after~~ alerts.

POSSIBLE SOLUTIONS:

EOC will issue a classification of warnings adding a color code.
Police stations hoist a flag.

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



INTERTECT

Survey Form: Problem Identification

(Eoc)

PROBLEM DESCRIPTION:

No sandbags. All bags imported from India.
During last threat, bags were provided by Bawite &
Singer companies.

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



Survey Form: Problem Identification

(ECC)

INTERTECT

PROBLEM DESCRIPTION:

Many "shadow" areas where radio does not reach.
Need map and list of communities, and break-up plans
for contacting these areas and notifying them at
various phases of ~~the~~ alert.

POSSIBLE SOLUTIONS:

~~contact~~ Ask JBS to id these areas, then develop ~~to~~ link
w/ police.

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



INTERTECT

Survey Form: Problem Identification

EOC (Frederick Floods)

PROBLEM DESCRIPTION: No delegation of authority. EOC Director needs to delegate authority for each function instead of ~~just~~ doing it himself.

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



INTERTECT

Survey Form: Problem Identification

EOC (Friedrich Floods)

PROBLEM DESCRIPTION:

EOC's only link is telephone. Noel runs on duty at ~~central~~ ^{strategic} locations and on assignment in capital.

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



INTERTECT

Survey Form: Problem Identification

EOC ~~Site~~ (Friedrich Floods)

PROBLEM DESCRIPTION: Shelter Managers often could not be contacted because they had no phone.

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



Survey Form: Problem Identification

INTERTECT

EOC (Friedrich Floods)

PROBLEM DESCRIPTION: shelters could not be opened due to fear of vandalism.
(Reports from June flooding in process discouraged owners from letting them be used)

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



INTERTECT

Survey Form: Problem Identification

EOC (Fred. Floods)

PROBLEM DESCRIPTION: EOC need to depend on local committees. It cannot control situation from Kingston - Must assume role of co-ordinator.

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



INTERTECT

Survey Form: Problem Identification

EOC (Food Floods)

PROBLEM DESCRIPTION: When LERC co-ordinator left island, no one was available to alert LERCs to action. Need clear back-up assignments.

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:



INTERTECT

Survey Form: Problem Identification

EOC (F. Floods)

PROBLEM DESCRIPTION:

EOC not in mainstream of ^{em.} actions. Need to work out role of co-ordinator and make presence known.

POSSIBLE SOLUTIONS:

ACTIONS TAKEN AND JUSTIFICATION:

PROBLEMS ENCOUNTERED:

LESSONS LEARNED:

Name:

Title:

Organization:

Address:

Date:

EOC (F.F)

Question 1d: Shelters program takes up an extremely disproportionate amount of time of EOC.

EOC (P.F.)

Problem Id: Too many non-essential people in EOC office.

EOC (FF)

Problem ID: Don't know what ^{info} to request from diff. ministries -
(ex. do not know what data to ask with office part.)
How to use data when it comes in.
(ex. How to plot flood data)

Possible solutions:

1. ~~Make~~ ^{Develop standard} Data requests as part of EOC plan.
2. Train co-ordinators in how to use tech. data (workshops or train)
3. Work out this type of ~~requests~~ info. necessary

Survey Form: Issues



(INTERTECT Staff Summary)

INTERTECT

EOC/GOS

ISSUE IN BRIEF:

Shelters (Community)

BACKGROUND INFORMATION:

After floods 3 weeks earlier, EOC & Red Cross set up emergency relief shelters all over country. These were usually schools or churches. When Hurricane David approached, these became de facto cyclone shelters and EOC & Red Cross prepared to tell people ~~not~~ to go to them when the storm hit. INTERTECT consultant warned against this policy and after the reports came in from the DR of 400 people killed in the collapse of a shelter, the debate was set off.

VIEWPOINTS:

1. ~~Red Cross~~
EOC: Shelters are needed to protect people from high wind if they live in flimsy dwellings
2. Red Cross: Besides above (1) shelters make relief distribution easier.
- 3.
- 4.

ACTIONS TAKEN:

1. All shelters on coast checked to determine wind/surge resistance.

RESULTS:

COMMENTS:

DATE:



Survey Form: Issues

(INTERTECT Staff Summary)

INTERTECT

ISSUE IN BRIEF:

Small shop owners complaining that feeding programs are cutting into their business.

BACKGROUND INFORMATION:

Due to standing water, relief programs have been maintained esp. feeding. Small store owners want govt to give people money so they can buy from them. They say they are the secondary victims of the floods.

VIEWPOINTS:

1. Govt & R.C.: Food is available (from donors) therefore use it.
\$
2. " " " (2 months later) Change to tickets and cash distribution so that local shopkeepers will benefit. (By Sept 15)
- 3.
- 4.

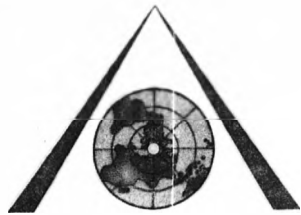


ACTIONS TAKEN:

RESULTS:

COMMENTS:

DATE:



Survey Form: Issues

(INTERTECT Staff Summary)

INTERTECT

EOC / Floods

ISSUE IN BRIEF:

- Food is a problem in affected areas where people are out of work and w/ limited income until water recedes. Issue is whether people should receive food directly or \$ in welfare payments and buy their own.

BACKGROUND INFORMATION:

The govt wants to quit all feeding by 15 Sept and issue cash grants. People are afraid that it will mean a complete cut off of aid. Red Cross agrees that food programs should be terminated. ~~the~~ problem is now a political issue.

VIEWPOINTS:

1. opposition members: Don't want to give money because they say people won't use it for buying food.
2. EOC / Min SS: Don't want to pursue feeding because of logistics and security problems. Some perceive problems if food distribution keeps up.
3. Major Lewis, NEN:
EOC director: would like an alternative.
4. INTERTECT: Have recommended a coupon or food stamp system.

ACTIONS TAKEN:

INTERCOM requested to outline suggestions to EOC.

RESULTS:

COMMENTS:

DATE:



Survey Form: Issues

(INTERTECT Staff Summary)

INTERTECT

ISSUE IN BRIEF: Should "tourists" be allowed into flooded regions.

BACKGROUND INFORMATION:

After floods, thousands of Americans drove into the area to see the damage & the lakes. Govt & Red Cross were upset that a thriving "tourist" business developed with local shopkeepers selling meals & drinks to "tourists". They complained that people were selling the relief items. (many other objections)

After several weeks Govt decided to restrict access to the area by road blocks. Local shopkeepers were upset about this action as it deprived them of income.

VIEWPOINTS:

1. Shopkeepers: Say they would worry if Govt has no right to stop or slow their business.
2. Govt & Red Cross:
 1. Tourists are "in the way" and hamper relief efforts.
 2. Food & other items are given to victims and were not to be resold, thus sales must be controlled.
3. Victims: In some cases, they would rather ~~to~~ have the \$.
4. EOC: "Tourists" pose an additional safety problem, especially if they go out on the lakes.



ACTIONS TAKEN:

RESULTS:

COMMENTS:

DATE:

Frédérick Floods -- Temp. Actions

* Build up a staff - Need:

1. Issue flash flood & landslides warnings (by police in shadow areas)
2. Plot the reports of flooding to determine a pattern
3. Organize an SAR plan
4. " AN ASSESSMENT party
5. Check w/ vologs to see what they are doing. Call a meeting for AM to coordinate relief.
6. Prepare a dist. status report for A.M.
7. Check w/ water dept. to monitor reservoirs
8. Prepare a briefing for API - check to see if warnings have been issued
9. " " " " Ministry/Govt
10. Ask police to ~~monitor~~ alert shadow areas
11. " " " " notify you if radio is cut off in any area.
12. Ask PWD to " " of their actions / problem areas.
13. Delegate these tasks.

~~14~~

Thoughts' Staff Needs

1. API co-ordinator
2. Police co- "
3. PWD " "
4. Red Cross "
5. LERC "

Emergency Ops
Plan (EOC)

Principles of NDO

NEAC - Natl Em. Advisory Committee

Make up: High, but not top, people in ministries

1 rep. of PM's office

1 " " Volags

3 open places for appointments during emergency

This allows entry & participation of the political function w/o domination of politics ^{during} this ~~part~~ period (i.e. the committee is stable)

Function:

- To set policy
- To see that their own sectors are represented & prepared
- To provide the political input necessary
- To give credibility to plans

NDO - Natl Disaster Organi.

Make up - full time, professional & technical staff
supplemented by part time functionaries from ministries & volags

Function - to ~~also~~ develop disaster preparedness & Em. ops.

Plans -

to develop a local response capability

to assist in transition from ~~disaster~~ ^{Em.} to recovery

LERC - Local Em. Response Committee

Make-up: Police, PWD, Panch Council Sec., ~~SSA~~ ^{social security}, co-ordinator, Ministry of Agriculture, Volags, Churches, P.S. Office, Water, Service clubs, etc. Major industries, Hospitals

Function: To handle the Em. at the local level.

1. Unfinished business: ADO planning

1. Outlining the action plans

" A preliminary budget

writing job specs

Statement of goals & objectives

Development of policies

" " schedule for implementation.

selection of format for plan(s) National & Local

2. Unfinished business: shelter surveys

3. Govt actions

3. works -

Infrastructure - water, sewer, etc. -

Health

Housing - 5 million hq.

- settlement site, loans, etc., using existing organizations
(EX. sugar industry)

- projects,

Agriculture - crops, loans

Amazons - services

most of funds will be from

Regional planning & development

Function - probably oriented - will use existing system

Need Sector reports from report 12

high priority -
developed -
initial -
level 6 -

21

report - table
initial -
initial -
initial -

initial -
initial -
initial -
initial -

initial -
initial -

22



EMERGENCY OPERATION CENTRE STORM SURGE (TIDAL WAVE) PLAN

Step 1

When the eye of the storm is within 200 miles of any part of Jamaica's coast, the EOC should request hourly radar reports on the location of the eye of the storm.

Step 2

When the eye of the hurricane crosses the Outer Surge Warning Line, the following actions should be taken:

- (a) A general storm surge (Tidal Wave) alert should be issued via the news media. (A sample bulletin is attached). Alerts are issued on a sector by sector basis determined by the relation of the eye to the closest point in the sector. Sectors are identified on the Storm Surge Warning Sectors Map.

The expected average height of the surge should be determined. A table of storm surge levels is provided by sector, on the Storm Surge Warning Sectors Map. This information should be included in the general storm surge alert.

- (b) EOC field operatives should be notified directly.
- (c) Shelter managers should be instructed to open their buildings.
- (d) Police should prepare to notify and assist in evacuation. When the alert is given it may be safely assumed that a minimum of 2 hours exists before any evacuation order is given.

Step 3

When the eye of the hurricane crosses the Inner Surge Warning Line, the following actions should be taken:

- (a) An evacuation notice (order) should be issued via the news media. (A sample bulletin is attached).

Evacuation notices are issued on a sector basis determined by the relation of the eye to the closest point on the sector. The possible surge level should be redetermined and this information should be communicated in the bulletin.

- (b) EOC field operatives and police should be notified directly to begin the evacuation.

STORM SURGE WARNING SECTORS

The coastline of Jamaica has been divided into eight sectors for the purpose of disaster management. Storm Surge (Tidal waves) Alerts are to be issued when the eye of a hurricane approaches 125 miles of any point on the north coast or 150 miles of the south coast.

EVACUATION NOTICES (ORDERS) are to be issued when the eye is within 100 miles of any point of the north and 125 miles of any point of the South Coast. (These are determined by locating the eye of the storm on the Surge Warning Zone Map).

Likely storm surge heights are listed at Table 1.

Category	Open Sea Height	Poss. Narrow shelf value	Poss. wide shelf value.	Arrival
1.	4-5'	6'	10'	2-4 hours before eye (h.b.e.)
2.	6-8'	10'	16'	2-4 h.b.e.
3.	9-12'	14'	24'	3-5 h.b.e.
4.	13-18'	22'	36'	3-5 h.b.e.
5.	18'	22'		3-5 h.b.e.

TABLE 1

The sectors and major towns in each are listed below:

SECTOR	RISK AREAS
<u>Sector 1:</u> Morant Point to Pt. Antonio	Holland Bay * Boston Bay Port Antonio*
<u>Sector 2:</u> Pt. Antonio to Annatto	St. Margarets Bay * Hope Bay Orange Bay Fig Tree Bay Annatto Bay*
<u>Sector 3:</u> Annatto Bay to St. Anns Bay.	Port Maria Oracabessa White River Bay Ocho Rios St. Anns Bay *
<u>Sector 4:</u> St. Anns Bay to Palmouth	Discovery Bay Palmouth
<u>Sector 5:</u> Palmouth to Negril	Montego Bay* Hopewell * Lucea * Lances Bay - Negril
<u>Sector 6</u> Negril to White House	Savannah-la-mar * White house.

SECTOR	RISK AREAS
<p><u>Sector 7:</u></p> <p>(Shallow, wide coastal shelf area) Whitehorse - Bull Bay</p>	<p>Black River and Edges of lower morass Great Pedro Bay Alligator Pond Bay Rocky Point Portland Bight Kingston Harbour (and Portmore) Port Royal Bull Bay *</p>
<p><u>Sector 8:</u></p> <p>Bull Bay to Morant Point</p>	<p>Yallahs The Salt Ponds Morant Bay Port Morant Bowden Holland Bay *</p>

* Areas also subject to flash flooding.

SAMPLE BULLETIN

General Tidal Wave Alert

Mr(s)....., official spokesman for the Emergency Operations Centre has issued a tidal wave (storm surge) alert for sections of the.....coast.

Tides are expected to gradually increase to between..... feet andfeet above normal along.....coast between (time) and (time).

Tides may be more thanfeet in the sector between.... and.....

All persons living along the coast in this area should be prepared for possible evacuation within the next few hours. All persons in this area are advised to continue to listen to the radio for further information and possible evacuation orders.

If an evacuation order is issued all persons in the area should move inland to high ground at least.....feet above sea level.

The following shelters may be used:-

1. In (community) the shelter is (name) located at (address)
2. "
3. "
4. "

(REPEAT)

SAMPLE BULLETIN

Evacuation Notice

This is an evacuation notice for areas along the.....coast issued by Mr. (s), official spokesman for the Emergency Operations Centre.

A tidal wave approximately.....feet is expected to approach this area within.....hours.

All persons living the low lying areas between.....and.... are advised to move immediately to high ground.

All persons should move inland to a place a minimum of..... feet above sea level.

The following shelters which are at a safe level above the expected tidal wave may be used.

- | | | |
|----|-------------------------|------------------------------|
| 1. | For (Name of Community) | (Name of the Closest Shelter |
| 2. | " | " |
| 3. | " | " |
| 4. | " | " |

(Insert)

EOC FLASH FLOOD PLAN

Areas Subject to Flash Flooding, Storm Surge (Tidal Wave)

FLASH FLOODS/LANDSLIDES

To Public

- Issue General Flash Flood warning to persons in low lying areas naming areas and localities known to be flood prone.
- Issue landslide warnings.

To EOC Field Agencies (Police etc.)

- Issue specific areas advisories, orders or alerts based on flood history and current projections based on meteorological conditions/trends.

SAMPLE BULLETIN

Flash Flood Warning

This is a flash flood warning issued by Mr.(s)..... official spokesman for the Emergency Operation Centre for the following parishes:-

- 1.
- 2.
- 3.
- 4.

Persons living in areas in these parishes which have experienced flooding before and those living in mountain valleys, low lying areas or near rivers and streams should move to safe areas as soon as possible.

Persons living in areas where landslides

Persons living in areas where landslides have happened before should also be alert to the possibility of new slides at this time.

Flash floods caused by heavy rains associated with (name of storm) can be expected to form quickly and flood these areas.

(REPEAT)

SAMPLE BULLETIN

EVACUATION ~~WASTE~~ Alert

Mr(s), official spokesman for the Emergency Operations Centre has issued a tidal wave (storm surge) ~~alert~~ ^{Alert} for sections of thecoast.

Tides are expected to gradually increase to between ... feet and ...feet above normal along coast between (time) and (time).

Tides may be more than ...feet in the zone between and

All persons living along the coast in this area should be prepared for possible evacuation within the next few hours. All persons in this area are advised to continue to listen to the radio for further information and possible evacuation orders.

If an evacuation order is issued all persons in the area should move inland to high ground at least feet above sea level.

The following shelters may be used:-

1. In (community) the shelter is (name) located at (address)
2. ditto
3. "
4. "

(REPEAT)

SAMPLE BULLETIN

Notice

EVACUATION ORDER

This is an evacuation order for areas along the coast issued by Mr.(s), official spokesman for the Emergency Operations Centre.

A tidal wave approximately feet is expected to approach this area within hours.

All persons living in the low lying areas between and are advised to move immediately to high ground.

All persons should move inland to a place a minimum of feet above sea level.

The following shelters which are at a safe level above the expected tidal wave may be used.

1. For (Name of community) (name) is the closest shelter

2. "

3. "

4. "

(Repeat)

SAMPLE BULLETIN

FLASH FLOOD WARNING

This is a flash flood warning issued by Mr (s) ,
official spokesman for the Emergency Operation Centre for the
following parishes:-

- 1.
- 2.
- 3.
- 4.

in these parishes
Persons living in areas/which have experienced flooding before and
those living in mountain valleys, low lying areas or near rivers
and streams should move to safe areas as soon as possible.

Persons living in areas where landslides have happened before,
should also be alert to the possibility of new slides at this time.

Flash floods caused by heavy rains associated with (name of storm)
can be expected to form quickly and flood these areas.

(REPEAT)

