

VOLCANO EVACUATION PLAN PAMPHLET

7 Jun 91 1700L

INTRODUCTION

Mt Pinatubo has not erupted for over 600 years. However, recent events suggest that this could change. As a result, U.S. and Philippine experts are closely monitoring the volcano, 24 hours a day. Also, the Clark AB command authorities are providing this pamphlet for your use to plan accordingly.

Keep in mind that even with our best efforts, several hours may be all we have before the volcano erupts. This might happen at any time day or night. The bottom line? To prepare in advance to ensure your safety and the safety of your family.

This pamphlet gives you the best information based on the circumstances at the time it was printed. Your unit is keeping an up-to-date plan with checklists and things that need to be done. Stay in contact with your First Sergeant or Commander for information.

A final note. This pamphlet was based on a "worst case scenario" which may never happen. Your unit will keep you informed as to how things are going on the mountain and what steps you should be taking.

Again our immediate concern is your safety.

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1. Where you are going.

If we are required to evacuate, all non-essential personnel, dependents, and pets will go to Subic Naval Base. However, with your commander/1st Sgt approval you can go elsewhere if you provide them with your address and phone number. The Navy has plans to house and feed everyone from Clark on an emergency basis.

Our immediate concern will be to get everyone safely to Subic and out of harms way. Once we are re-established at Subic, senior leadership will evaluate the situation and determine how long we will stay and whether we return to Clark or go on to some other destination.

For off-base personnel, you are not in safe areas listen to FEN for definitive guidance.

Upon arrival at Subic, you will be directed where to go and what to do. You will be met by your organizational representative at the Subic Sampiguita Club (bldg 418) who will provide you further assistance.

2. What you should plan to take with you.

Everyone should start right now to build a "Bug-Out" kit containing what you will need. This should be kept ready to go at all times. The list of items below gives you things to consider which you can tailor to fit your particular circumstances.

ITEMS YOU NEED TO TAKE

1. Cash for each family member (both dollars and pesos)
2. I.D. cards
3. Passports/Visas
4. Ration cards (CEX)
5. Immunization records
6. Birth certificates
7. Marriage certificate
8. Toiletries
9. Three sets of clothing for each family member
10. Pillow and blanket or sleeping bag for each individual.
11. Vehicle registration and car insurance policies
12. Checkbook/Bankbook/Credit Cards
13. Personal insurance policies
14. Inventory of all household goods
15. Will(s)
16. Personal medications
17. Infant care items (diapers, toys, formula, portable crib, stroller, etc)
18. Water supply for 1 day
19. Food/snacks for 1 day
20. Food for pets (3 days) and leash
21. POVs should have 1/2 to 3/4 tank of fuel
22. Flashlights with spare batteries
23. Portable radio with spare batteries
24. Candles/matches
25. Bug repellent
26. Sun screen, hats, etc..
27. First aid kit, knife, rope, tool kit
28. Toilet paper

NOTE UPON LEAVING QUARTERS:

1. Turn off all airconditioners/central air or other ventilation devices
2. Turn off electric ranges, washers and dryers. Keep refrigerator and freezers on.
3. Close all windows.
4. Leave some interior and all exterior lights on.
5. Lock all external doors.

3 When and how you are going to get off-base.

a. The following guidelines will help assure an orderly flow from the housing areas.

b. You will be notified to leave Clark AB by:

(1) Unit recall roster

(2) Announcements on FEN

(3) Base siren sounding a steady tone for five minutes. If this occurs tune in to FEN radio/TV for further information.

(4) The Security Police using their vehicle PA system in the housing areas

(5) Giant Voice (flight line speaker system) broadcasts

c. Once you are notified, everyone except essential personnel will prepare to evacuate to Subic Naval Station.

d. Pick up your "Bug Out" kit and use your POV to go to the flightline following the routes on the attached maps. Attachment 1 is the Base Evacuation Route and Attachment 2 is the Route to Subic.

(1) Personnel with automobiles should depart immediately to the flightline area. Take everyone in your household including your domestic help and pets. Use the buddy system. Check the house to the right and left of you for occupants. Do not forget anyone!!

(2) Those without automobiles arrange to catch a ride with a neighbor or squadron member. Military family housing occupants should pick up any members they see needing a ride. Be friendly!!

(3) Note that cabs may or may not be running.

(4) If you have been left in the housing area without transportation, call the Sub Motor Pool 393-3341/42 or the Security Police 393-3484.

(5) Should evacuation of off-base people become necessary, military, contractor, DoDDS, and US civilian personnel, and their dependents who need transportation should report to the Quad Agency Patrol (QAP) area at the Main Gate. Show your ID card when you arrive and the QAP will make transportation arrangements.

e. TRAFFIC FLOW (See Maps)

(1) To prevent major traffic backups at the various gates, families from base housing will be directed to the flight line on three major routes. Security Police will be at all major intersections to direct traffic smoothly.

(a) Mitchell Highway (Sector I): Houses in the hill area west of where Mitchell intersects Anderson and those houses south of Mitchell highway as it passes through the main base will be directed onto the flightline at the 1st Test/South ramp entry control point and further directed off base.

(b) Dyess Highway (Sector II): Families in the hill area east of Mitchell highway should proceed down Anderson or Dyess then proceed down Dyess Ave where they will be directed to the flightline and then off base.

(c) Bong Highway (Sector III): Families in the main base area (Sector III) will be funneled to Bong highway and then directed onto the flightline and off base.

(2) The primary exit will be through the Dau gate and then onto the Northern Luzon Expressway. If alternate exits/or routes are used, personnel will be directed by the Security Police.

(3) Once you enter the expressway, head south toward Manila. Exit at San Fernando. Turn right and continue straight ahead through the traffic light. Your next major turn is a Dinalupihan where you again keep right and head toward the mountains. There will be joint US/RP patrols at all intersections to provide assistance. There is no need to be in a hurry--make this a safe trip. There will be patrols along the route to provide assistance if you break down.

107th AFB
MT. PULAGAN

Subic
Naval
Base

Quinsay

KALAKAN
CITY

RT-7

DUMAGUITE

2000 ft
to
5000 ft

RT-7

San
Antonio

Clark
AB

107th
AFB

107th
AFB
107th
AFB

107th
AFB

Abilene

F-1

107th
AFB

Manila
Clark
AB

N

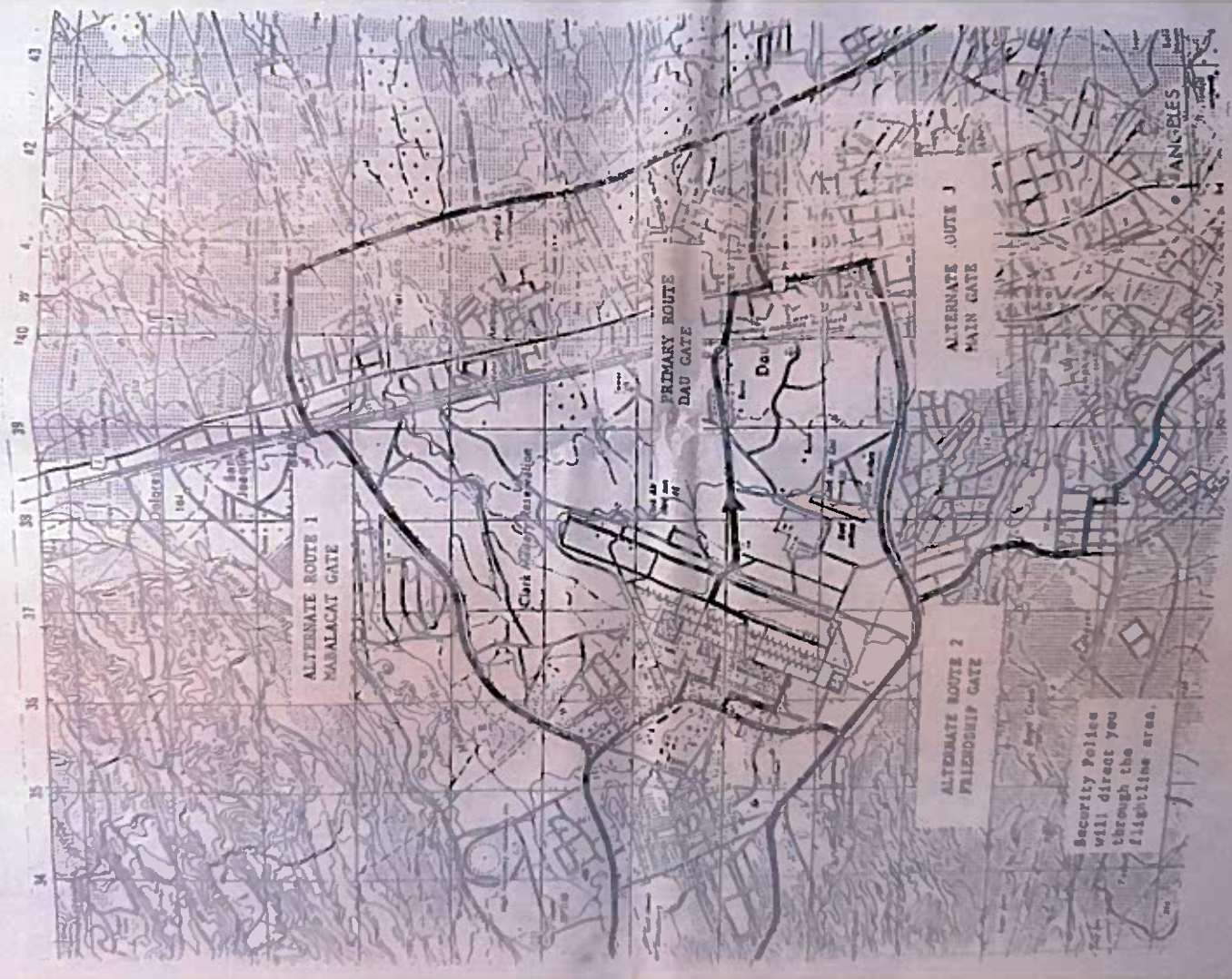
Enter the Northern Luzon Expressway heading south toward Manila. Exit at San Fernando. Turn right, continue through the traffic light at McArthur going toward Olongapo. Your next major turn is at Dinalupihan where you will again turn right heading towards the mountains. There will be joint US/R2 patrols at all key intersections for any assistance you might need with directions. HAVE A SAFE TRIP!

4. What to do when you get to Subic.

- a. When you arrive at Subic, follow the instructions of the Navy personnel for quarters assignment and of AF PERSCO personnel located in Bldg 418 (The Subic Sampiguita Club) for inprocessing. Advance teams from your military unit will be set up to assist you. Provide your name, organization, SSAN, names of family members with you, and of any who may be missing.

- b. After you inprocess, Subic will provide transportation to your Billeting location.

- c. Remember, take care of your families. Stay tuned to the various FEN AM, FM, and TV channels for more information. You may also get official AF news from the Manila media.



ALTERNATE ROUTE 1
MALACAT GATE

PRIMARY ROUTE
DAU GATE

ALTERNATE ROUTE 2
FRIENDSHIP GATE

ALTERNATE ROUTE 3
MAIN GATE

Security Police
will direct you
through the
flightline area.

LOS ANGELES

34 35 36 37 38 39 40 41 42 43

5. What you will do when the emergency is over.

a. We will keep you advised, so stay tuned to FEN.

b. There are several things that could occur.

(1) Worst case, Clark Air Base would not be habitable. Should this happen, you would stay at Subic until the AF could make arrangements for you to leave. Some of you would be sent to the US. Others could volunteer for a continuous overseas tour (COT) and, if there is a need for your specialty, be sent to another overseas base. Since volcano damage would be considered total, you would need to make your personal property claims through the legal office. In this case, legal personnel would be available to assist you. We will let you know over FEN how to contact legal to make your claims.

(2) Best case, we could return to Clark. Upon return, carefully inventory your belongings and check for damage. You have the right to make a claim for damaged or missing items. Leadership requests you report all facilities damage to civil engineering personnel, but otherwise begin cleaning up your immediate area. We'll provide you information on what to do first to minimize possible damage or injury. Again, listen to FEN for further guidance.

6. Volcano Characteristics:

a. Ash. Fine material blasted aloft by a vertical explosion from the volcano that could reach an altitude of 12 or more miles. As the ash cloud spreads it could be dense enough to screen out nearly all sunlight. While ash will be deposited over an enormous area, the heaviest deposits will be on the downwind side of the volcano. Ash is a hazard to driving and all things of a mechanical or electronic nature, including telephones, computers, and aircraft.

b. Pyroplastic Flows. Are hot, often incandescent mixtures of volcanic fragments and gases that sweep along close to the ground. Depending on the volume of material, proportion of solids to gas, temperature, and slope gradient, they can travel in excess of 100K/H. They are extremely destructive and deadly because of their high temperature, which ranges from 450 to 1000 degrees C.

c. Mud Flows. Are mobile mixtures of volcanic debris and water, where water is available to erode and transport the loose deposits of debris, that are very destructive, could begin within 30 minutes after the start of an eruption, and will follow existing river channels.

d. Lava Flows. Are molten rock that emerge from volcanoes. They are very hot, but move very slowly, and are not a factor at Clark.

e. Projectiles. Are airborne products of a volcanic eruption that could be hurled a distance of about 10K from the volcano. We plan to move you well outside that area and provide you with an additional margin of safety.

7. Questions and Answers!

1. How long will the eruption last, assuming it does erupt?

It could be for a day or from two to three months or more.

2. Can the volcano emit water and what happens if it does?

Not this volcano. However, rainfall could cause very dangerous mud flows and/or flash floods down local valleys.

3. If it erupts, how far could it hurl projectiles?

While it is impossible to predict accurately, pieces of rock weighing several tons could be blasted up to ten kilometers.

4. Are fissures in the earth possible?

Yes. They could open and close very quickly, but there is no danger of this at Clark. The greatest danger is on Mt Pinatubo, where we shouldn't be under any circumstance.

5. What is the nature of a lava flow?

As you know, lava is liquid rock that has all the characteristics of fluids. As it flows down hill, it will follow the sloping terrain. Occasionally, a river of lava will split and split again, only to rejoin later trapping all those unfortunate enough not to have gotten away. Those trapped will probably die from either the heat or asphyxiation. However, it is very slow moving and we don't expect much of this from this volcano.

6. Could this volcano explode like Mt St Helens? If so what would it be like?

Volcanoes are unpredictable. We think it could explode because all volcanoes have that possibility given the right circumstances. If it does, the noise of the explosion would probably be heard throughout Luzon, and possibly in Viet Nam. The blast could be up to or in excess of 100 miles per hour and carry temperatures from 450 to 1000 degrees (centigrade).

7. Is there any danger from the sulfurous air?

It depends. In small quantities, there is not much danger. The human nose will detect hydrogen sulfide in trace quantities, but there are no medical effects. Sulfur dioxide is a respiratory irritant. Both chemicals are being monitored in the air and will be posted similar to smog alerts in LA. Alerts will be announced on FEN.

8. How many active volcanoes are there in the world?

There are about 500 active ones at this time. Several thousand are extinct, while others located under the sea, both active and extinct, are unknown.

9. Isn't this like the volcano in Hawaii? Why should I be concerned?

While all volcanoes are related in their potential for destruction, some are reasonably predictable. The volcanoes in Hawaii have been active for some time. We know what to expect from them. Others, like Pelee on the Caribbean island of Martinique, exploded violently killing over 30,000 in one day. Two years later, just as people were beginning to return, it erupted violently again, this time killing over 2,000. Another volcano, Krakatoa, on an island between Java and Sumatra exploded violently and the blast was heard over a thousand miles away. The volcano destroyed itself and the island. Mt Pinatubo is relatively unpredictable, since it hasn't erupted in over 600 years. The magma from Pinatubo is a thick, explosive type; while that from Hawaii is a fluid, relatively non-explosive type. Not knowing exactly what type eruption to expect, we must proceed cautiously, advise everyone to be concerned, and to plan for the worst. If the eruption is less than it could be, we will all be relieved.

10. How long would we have to stay away before we are allowed to return to Clark? What if we can't come back?

We will have to determine this based upon USGS analysis and senior management judgement. If the base is habitable, we'll let you return as soon as it is safe for you to do so.

If the base is destroyed, or the decision is made that we should not return for reasons that we have not yet considered, we will either transport you to another US military installation, such as Hickam for reassignment, or reassign you from Subic.

11. What will become of all our things? Can we go back and get them?

If the base is habitable, you'll be allowed to return to your quarters. When you return, carefully inventory your items and report damage or loss to the legal office.

If the base is not habitable, you will not be allowed to return. You should then file a claim with the legal office.

12. If we evacuate Clark, can we take our domestics and our pets?

The answer is yes. However, facilities at Subic are limited and dedicated to US military, contractors, DODDS, US employees, and dependents. While it is not feasible to take domestics to Subic, it is imperative that we not leave them behind on-base because to do so could mean their death. They should be removed from the housing area and, once on a safe part of base, allowed to go their way and join their friends and family.

13. Do you anticipate a traffic problem between here and Subic or Manila?

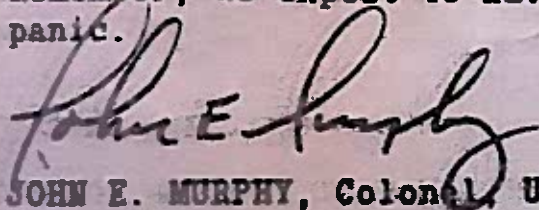
Absolutely. The 1.5 to 2 hour ride to Subic could be greatly extended. Based on the traffic we believe will be on the road and assuming the road stays bi-directional, you could expect a 6

hour plus trip. However, we are working with Civil Defense authorities to turn the highways into 'away' traffic only. That would make a two lane single direction highway from here to Subic and as much as a 6 or 8 lane highway into Manila, and greatly enhance traffic flow. But you should not count on single direction traffic. Make sure you have enough gasoline.

14. How can you ensure all people are removed from Clark?

No system will be error proof. However, if we use the buddy system, by that I mean check the houses to your right and left and physically ensure no one is left behind, we can be reasonably sure we get everyone out. This will work day or night. The same procedure should be used in the dorms.

Remember, we expect to have sufficient notification, so don't panic.



JOHN E. MURPHY, Colonel, USAF
Commander