



HURRICANE IRMA AND THE EFFECTS ON THE BRITISH VIRGIN ISLANDS

12TH NOVEMBER 2017

Dominican Republic , Midterm Meeting

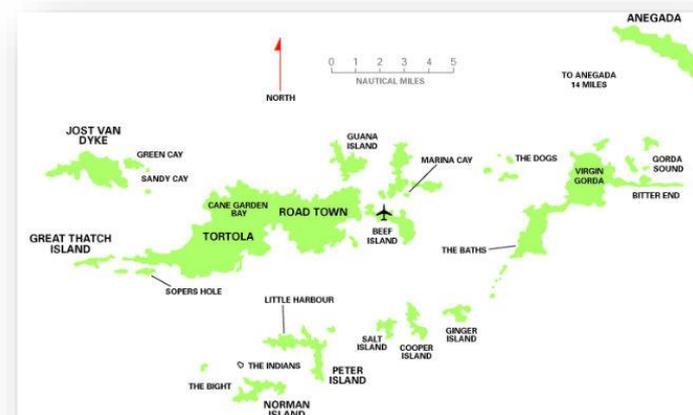
Presented by Jasen Penn





The British Virgin Islands

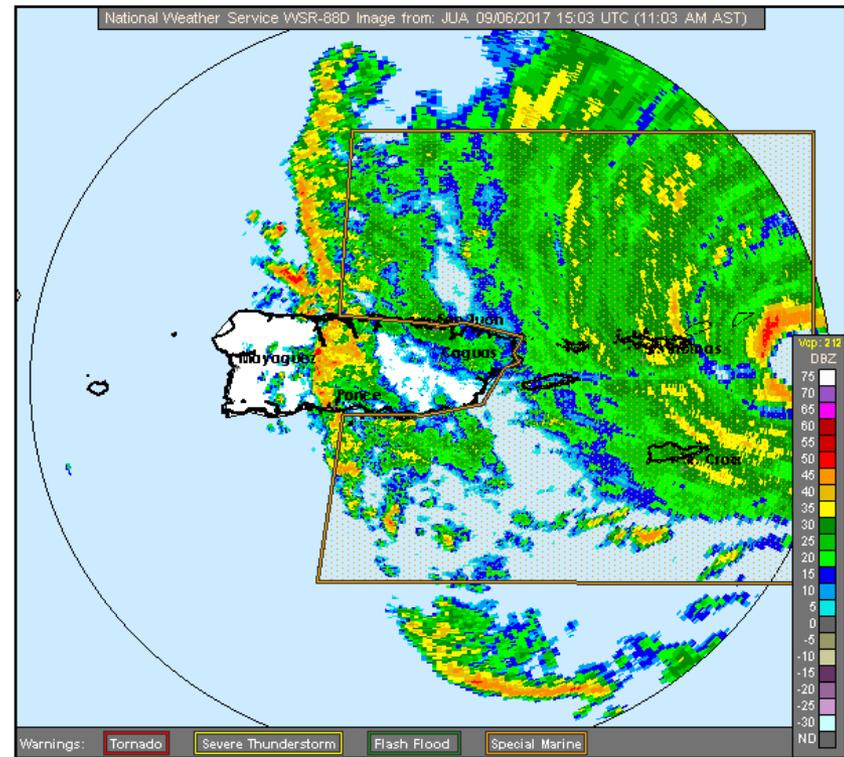
- A group of over 50 Islands & Cays located 60 miles east of Puerto Rico.
- Population about 25,000
- Tortola main Island carries about 12,000
- All Islands are of volcanic formation except for Anegada which is coral limestone.
- Names of the Islands are of Spanish and Dutch origin



HURRICANE IRMA



On September 6th 2017 Hurricane Irma category 5 hurricane passed directly over Road Town, Tortola, British Virgin Islands the location of the National Emergency Operation Centre



SATELLITE IMAGE OF IRMA JUST BEFORE IMPACTING THE BVI

LOSS OF THE EOC

THE PASSING OF IRMA LEFT A DEVASTATING AND STRESSFUL EFFECT ON THE STAFF MEMBERS OF THE DEPARTMENT OF DISASTER MANAGEMENT.

25 PERSONS EVACUATED THE EOC IN ORDER TO SAVE THEIR LIVES UNDER THE DECISION OF THE DIRECTOR WHO FELT IT WAS NOT SAFE TO STAY IN THE BUILDING.

THIS WOULD TURN OUT BE A WISE DECISION AS EVERY OFFICE IN THE BUILDING WAS COMPROMISED EXCEPT TWO.

MANY STAFF MEMBERS LOST ALL THEIR BELONGINGS AND ARE STILL SHAKEN BY THE WHOLE ORDEAL.



AMATEUR RADIO COMMUNICATIONS

- Amateur Radio Communications – The first reliable mode of communication used to make contact with the internationally community
- Radios were deployed to the sister islands of Anegada and Jost Van Dyke.
- Contacts were made with other countries such as Dominica before and after hurricane.



ACTUAL RADIO SALVAGED FROM DDM BUILDING AND USED TO COMMUNICATE INTERNATIONALLY



SATELLITE COMMUNICATIONS

**MORE THAN 80% OF OUR
SATELLITE COMMUNICATIONS
DID NOT WORK**

DIFFICULTY USING THIS
PARTICULAR MODEL



DIFFICULT TO USE DID NOT WORK
EFFECTIVELY DURING THE EVENT.

POSSIBLY DUE TO SPOT BEAM COVERAGE OF
SATELLITE NETWORK

SUCH COMMUNICATIONS PROVED USEFUL
CALLING LANDLINES AND MAKING
INTERATIONAL CALLS

BGAN EXPLORER 700

BGAN TERMINALS – THRANE &
THRANE WORKED WELL



SOCIAL MEDIA



www.bviddm.com



WHATS APP- UTILISED
HEAVILY FOR SENDING
INFORMATION,
PICTURES , VIDEOS

FACEBOOK – USED TO
SHARE INFORMATION
WITH THE PUBLIC
LOCALLY AND
INTERNATIONALLY



THE USE OF THE INTERNATIONAL COMMUNITY



- AFTER IRMA HAD PASSED, THE HURRICANE WIPPED OUT OR DISABLED ALL COMMUNICATIONS IN THE BRITISH VIRGIN ISLANDS FOR SOMETIME.
- ALL RADIO STATIONS WERE OFF AND THERE WERE NO MEANS READILY AVAILABLE TO FEED INFORMATION TO THE PUBLIC. NEIGHBORING USVI HAD ONE RADIO STATION THAT IS LISTENED TO BY THE BVI AND WAS USED TO BROADCAST EMERGENCY INFORMATION BACK TO THE BVI.
- THIS FILLED A HUGE VOID AS MANY BVI ISLANDERS HAVE FAMILY IN THE UNITED STATES VIRGIN ISLANDS WHO ALSO HAD CONCERNS ABOUT THEIR LOVED ONES.

THE USE OF TRUCKS WITH SPEAKERS

- AFTER ALL COMMUNICATIONS FAILED, TO PROVIDE INFORMATION TO THE POPULATION IT WAS DECIDED THAT TRUCKS OUTIFTTED WITH SPEAKERS SHOULD BE USED AS LOUD HAILERS WERE NOT LOUD ENOUGH.



VHF RADIO COMMUNICATIONS

- THE ENTIRE VHF RADIO COMMUNICATION NETWORK DDM AND OTHER AGENCIES WERE DESTROYED. TOWERS AND ANTENNAS TOPPLED WHEN THE FIRST PHASE OF THE HURRICANE BEGUN TO AFFECT THE TERRITORY.
- FOR THE NEXT FEW WEEKS MANY WOULD USED VHF MARINE AS THEIR SOURCE OF COMMUNICATIONS. ALTHOUGH SOME REPEATERS HAVE BEEN RESTORED, THEY ARE FUNCTIONING AT A MARGINAL LEVEL AND STILL NEEDS REPLACEMENTS



SERVICE PROVIDER TOWER MANGLED LOSING COMMUNICATIONS FOR THEMSELVES AND OTHERS THAT SHARED THE SAME TOWER

SIREN NETWORK

THE DDM LOST FIVE OUT OF ITS SEVEN SIRENS. THIS NETWORK TOOK YEARS TO BUILD AS EACH SITE WAS PURCHASED AS FUNDS BECAME AVAILABLE. PREPARATIONS ARE BEING MADE TO PURCHASE ATLEAST THREE WITH THE INTENTION OF REBUILDING THE NETWORK.

- THE NEW SIRENS UNLIKE THE ANALOG WIND DRIVEN UNITS WILL BE A CAPABLE OF VOICE ACTIVATION.
- IN ADDITION TO THIS STRENGTHENING METHODS ARE BEING RESEARCHED TO REDUCE THE LOSS OF UNITS DUE TO SNAPPED POLES





ONLY COMPLET WEATHER STATION
FOUND IN THE FIELD

- THE ENTIRE WEATHER STATION NETWORK WAS SEVERLY DAMAGED. OF THE 18 SITES ONLY ONE WEATHER STATION WAS FOUND WITH ALL COMPONENTS IN TACT.
- THIS STATION HOWEVER WAS SUBMERGED AND DATA LOGGER AND OTHER INTERNAL COMPONENTS MAY NEED TO BE REPLACED.

OF ALL NETWORKS INSTALLED IN THE BRITISH VIRGIN ISLANDS, THE SEISMIC NETWORKS SEEMED TO BE THE LEAST DAMAGED HOWEVER THIS IS ONLY FROM PHYSICAL OBSERVATION.

FURTHER EVALUATIONS WILL HAVE TO BE DONE TO DETERMINE IF THE EQUIPMENT IS FUNCTIONAL ONCE POWER IS RESTORED.

PRSN AND UNAVCO SITE GORDA PEAK VIRGIN GORDA



- ▶ BVI BUILDING STANDARDS NEEDS RE EVALUATING
- ▶ INSTALLATION OF FIELD EQUIPMENT TO BE DONE WITH ENHANCE METHODS
- ▶ SIGN MOU'S WITH INTERNATIONAL ENTITIES WILL IMPROVE PARTERNSHIPS FOR TERRITORY



QUESTIONS?



www.bviddm.com

Thank You!

bviddm@surfbvi.com

www.bviddm.com

<https://www.facebook.com/bvi.ddm>