

10/29/2021

**FOR YOUR INFORMATION**

2021-146/6-6

1839174

To: FAA (ATM ZMA ARTCC)

Info: FAA (AVP-1, AVP-200, ASO-600, AFS-280, AFS-200, Director of Air Traffic Operations  
ESA South), A4A, AAEE, ALPA, AOPA, APA, ASAP, ATSG, EAA, ICAO, ICASS, IFALPA,  
IPA, NAFI, NBAA, NTSB, RAA, SWAPA

From: Becky L. Hooey, Director  
NASA Aviation Safety Reporting System

Re: ZMA Center Radar and Communication Outages

We recently received an ASRS report describing a safety concern that may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the enclosed deidentified report.

To properly assess the usefulness of our alert message service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Dr. Becky Hooey at (408) 541-2854 or email at [becky.l.hooey@nasa.gov](mailto:becky.l.hooey@nasa.gov).



Aviation Safety Reporting System  
P.O. Box 189 | Moffett Field, CA | 94035-0189



## ACN 1839174

### DATE / TIME

Date of Occurrence	202109
Local Time Of Day	0601 to 1200

### PLACE

Locale	ZMA.ARTCC
State	FL

### AIRCRAFT / EQUIPMENT X

ATC / Advisory - Center	ZMA
Make Model Name	Any Unknown or Unlisted Aircraft Manufacturer

### PERSON 1

Function - Air Traffic Control	Enroute
ASRS Report Number	1839174

### PERSON 2

Function - Air Traffic Control	Enroute
ASRS Report Number	1839164

### PERSON 3

Function - Air Traffic Control	Enroute
ASRS Report Number	1839160

### EVENTS

Anomaly	ATC Issue - All Types
Anomaly	Ground Event / Encounter - Ground Equipment Issue
Detector - Person	Air Traffic Control
Result - General	Flight Cancelled / Delayed
Result - Air Traffic Control	Separated Traffic

### NARRATIVE 1

This type of event happens way too often in the Ocean area of ZMA. I have been at work before working sector 62 or 63 and the same thing has happened to me so I feel compelled to write this report. On Date there was a massive equipment failure. GDT (Radar and comm site) failed along with the GDT frequencies. The ZNY ATOP system failed also, along with the Santo Domingo ADE (Flight Plan Processing) system.

Because we are only one source of RADAR coverage and only one site of frequencies at sectors 62/63, when these fail it makes it impossible to provide safe air traffic services to the flying public. The Ocean area is in desperate need of some redundancy as we are constantly in danger of losing our only source of surveillance and usable frequencies. Whether it's because of maintenance or every year during hurricane season. If these type of events happen once it's one too many. Controllers were put in harms way and took drastic measures to maintain some type of order and safety to the flying public. It could've been horrible for everyone involved. Thankfully, there was no need to be on the evening news because of a catastrophic event. We need overlapping sources of surveillance and we need more coverage and back ups for the frequencies. We feel there is a lack of attention in the Ocean area and the flying public isn't aware of the potential danger. If the airspace was over CONUS (Continental United States) we would not be asked to deal with this. We are constantly having to use landlines to speak to foreign facilities because of the failures on the MEVA's [Multi

National Network System, Mejoras al Enlace de VOZ del ATS]. Please look into these issues and finally do something.

## **NARRATIVE 2**

I was working R62 combined with sector 43 and 63. The GTK radar failed around XA:30Z together with all frequencies at the GTK site. I was unable to communicate with any airplanes under my control initially. I started broadcasting on 121.50 off the ZIN site, and tried to advise all airplanes on frequency 126.45 and 135.20 that we had lost the radar and the frequencies, followed by an advisory to use extreme caution. There was also a lot of weather in the sector with a majority of airplanes in sector 62 and 63 deviating. I also kept broadcasting on 121.50 informing the airplanes to use extreme caution due to the outages, and to try to reach me on frequency 123.77 (ZIN site). I also tried reaching out to airplanes from the ZIN 126.45 site, but that frequency is very unreliable and I was unable to communicate there initially. After having re-established communications with numerous aircraft, now on frequency 123.77, I was able to take appropriate actions to separate airplanes that needed vertical separation, and re-routed some northbound airplanes to the west towards frequency and radar coverage. I established vertical separation with these airplanes. With the help of surrounding sectors, surrounding facilities and great teamwork in the area, we were able to avoid any disastrous consequences.

We need a new backup frequency site that can cover the entirety of sector 62 and 63, and more importantly an additional radar/ADS-B feed that will prevent us from going non-radar. We cannot rely purely on non-radar procedures if we lose the frequency. There needs to be a push to fix these problems! Additionally, we need to make sure the backup frequencies actually work properly. 126.45 at ZIN was working horribly and could not be considered as a reliable backup frequency, especially during times it was most needed.

## **NARRATIVE 3**

We lost the GTK (Grand Turk) site completely, this includes radar and frequencies. We were busy and had no way of seeing or communicating with any aircraft on sector 62 or 63. When I showed up to my shift the radar/frequencies were out. I plugged in at sector R58 and had to re-route every single aircraft out of Sector 62 and 63.

I recommend we continue to push for Space-based ADS-B and install a new back up frequency site, the current equipment that we have is outdated and unreliable, it can go out at any moment.

## **SYNOPSIS**

ZMA Center Controller reported repeated radar and communication site outages in the Oceanic Area create unsafe situations. The reporter states there are no backup systems to the main sites.