

Stephan Bayens Commissioner

October 26, 2022

# Ref. AON 29C20 Allocation Request for 6-25-22 Lightning Strike Damage to Jones ISICS Communication Tower

State of Iowa Executive Council:

During the early morning hours of 6-25-22, a severe storm occurred in the Jones county region that caused multiple system failures at the Jones ISICS Tower. At 1018, on 6-25-22, Motorola technicians conducted an inspection of the Jones ISICS Tower. Motorola Support Manager, Dave Gordon, advised the tower sustained multiple areas of damage due to a massive power surge related to a lightning strike to the tower. The initial assessment indicated several breakers were tripped. The tower top light was inoperable due to water intrusion in the light controller box, the LP tank monitor was damaged and inoperable, and all ODU & RAC cards were severely damaged causing communication link failures. Winds from the storm also caused misalignment of the Jones tower dishes.

On 6-25-22, an Initial 29C20 Notification was submitted regarding the above damage (See attached). A NOTAM was also filed with the FAA due to the inoperable top light.

On 7-13-22, it was discovered the tower's Transmit Antenna was also damage due to the lightning strike (See attached 7-13-22 Jones Update email)

The overall repairs to this site have been extensive and, due to the difficulty in acquiring critical parts, the repairs have been delayed. Currently, the estimated repair cost for the Jones ISICS Tower is \$106,304.00 (See attached tracking spread sheet).

The DPS Interoperability and Communications Bureau is respectfully submitting a 29C20 Allocation Request for \$106,304.00 for this AON damage.

Thank you for your consideration.

Sincerely,

Captain Richard Pierce Bureau Chief Iowa DPS Communications & Interoperability Bureau Office of the Commissioner 215 E.7<sup>th</sup> Street Des Moines, Ia 50319

INTEROPERABILTY COMMUNICATIONS BUREAU • 215 EAST 7TH STREET • DES MOINES, IOWA 50319-0041 • 515-725-6095

**Protection All Ways** 

From:	Pierce Richard <pierce@dps.state.ia.us></pierce@dps.state.ia.us>
Sent:	Wednesday, October 26, 2022 1:10 PM
То:	ExecutiveCouncil [TOS]; Hollingsworth, Tammy [AOS]
Cc:	Dostal Sandra
Subject:	10-26-22 29C20 Allocation Request for 29C20 ref Lightning damage to the ISICS Jones
	Tower on 6-25-22
Attachments:	6-25-22 29C20 Notification AON Lightning Strike Jones Tower & misaligned dishes at
	Cedar Rapids and Maquoketa; RE: ** External Email Alert ** Jones Notam; ** External
	Email Alert ** Jones Update; 29C20 & FEMA Request Tracking Spreadsheet (310
	Copy).xlsx; 10-26-22 29C20 Allocation Request ref. Jones ISICS Tower - Lightening
	signed.pdf

Tammy & Executive Council,

Please see the attached 29C20 Allocation Request regarding the 6-25-22 lightning strike damage to the ISICS Jones Tower.

### **Captain Richard Pierce**

Bureau Chief Iowa DPS Communications Interoperability Bureau Office of the Commissioner 215 E.7<sup>th</sup> Street Des Moines, Ia 50319 Work Ph# (515) 725-6113 Cell Ph# (712) 269-0730

Email: pierce@dps.state.ia.us



From:	Pierce Richard <pierce@dps.state.ia.us></pierce@dps.state.ia.us>
Sent:	Saturday, June 25, 2022 4:32 PM
То:	ExecutiveCouncil [TOS]; Hollingsworth, Tammy [AOS]
Cc:	Fisher Mike; Guffey, Linda [DPS]; ISICSNOC; DAVID GORDON
Subject:	6-25-22 29C20 Notification AON Lightning Strike Jones Tower & misaligned dishes at
	Cedar Rapids and Maquoketa
Attachments:	RE: ** External Email Alert ** Jones Notam

### Executive Council and Tammy,

During the early morning hours of 6-25-22, a severe storm struck jones county region causing multiple failures at the **Jones ISICS Tower**. At 10-18, on 6-25-22, Motorola technicians arrived on site and conducted an inspection of the Jones ISICS Tower. At 1429, Motorola Support Manager, Dave Gordon, advised the tower sustained multiple areas of damage due to a major power surge related to a lightning strike (see below and attached). The initial assessment indicates several breakers were tripped. The tower top light is inoperable due to water in the light controller box, the LP tank monitor is inoperable, and all ODU & RAC cards were damaged causing link failures. Communication system redundancies are currently in effect for this region.

Furthermore, same regional storm produced high winds that caused misaligned dishes on the **Jones, Cedar Rapids & Maquoketa ISICS tower sites**. Damage assessments are still being conducted, additional damage could be discovered. A NOTAM was requested a submitted regarding the Jones Tower site due to the inoperable tower beacon.

Please accept this email as the required 29C20 Notification regarding AON Lightning and wind storm damage to the **Jones, Cedar Rapids, and Maquoketa ISIS Tower sites**. These AON repairs could take several weeks and a repair estimates for each tower will be submitted upon receipt from Motorola.

### **Captain Richard Pierce**

Bureau Chief Iowa DPS Communications Interoperability Bureau Office of the Commissioner 215 E.7<sup>th</sup> Street Des Moines, Ia 50319 Work Ph# (515) 725-6113 Cell Ph# (712) 269-0730

From: Dave Gordon <dave.gordon@motorolasolutions.com> Sent: Saturday, June 25, 2022 2:29 PM To: ISICSNOC <ISICSNOC@DPS.STATE.IA.US> Cc: Tad Keller <thaddeus.keller@motorolasolutions.com>; Jona

**Cc:** Tad Keller <thaddeus.keller@motorolasolutions.com>; Jonathon Neal <jonathon.neal@motorolasolutions.com>; Dan Chigi <danchigi@motorolasolutions.com>; Steven Pyle <steve.pyle@motorolasolutions.com>; DAVID GORDON <dave.gordon@motorolasolutions.com>

Subject: \*\* External Email Alert \*\* Re: Jones Site -Microwave Links Down

**\*\*External Email Alert**\*\* This email is from outside DPS. **DO NOT CLICK** links or attachments unless you expected them. If unsure please forward to <u>ITOC@dps.state.ia.us</u> for review.

Jones Update:

We have found various things that indicate a lightning strike or major surge.

Various breakers were tripped.

The SDM3000 is not working. The CMU for the tower top amp is dead. The tank monitor is dead.

The generator is running.

We believe that all 4 ODU's and 4 RAC cards were damaged causing the links to fail.

We are still troubleshooting and looking for spare parts.

Contact me if you have any questions.

Dave

On Sat, Jun 25, 2022, 10:32 AM Dave Gordon <<u>dave.gordon@motorolasolutions.com</u>> wrote: Good Morning,

The storm has affected both of the microwave links connecting Jones site.

This means that the site is in site trunking and those users can. Talk to each other on the site but not back to dispatch.

It appears that the dishes have been blown out of alignment and could need tower crews at all three sites. Jones, Cedar Rapids and Maquoketa.

We also cannot rule out any lightning damage at this point until things can be investigated further.

We will reach out to our tower crews to see when they can get here.

Please let me know if you have any questions.

Thanks,

Dave Gordon Customer Support Manager Motorola Solutions, Inc.

State of Iowa

M: +1.319.321.1134 E: <u>dave.gordon@motorolasolutions.com</u> For more information on how and why we collect your personal information, please visit our <u>Privacy Policy</u>.

From:	VanOtterloo Debra <dvanotte@dps.state.ia.us></dvanotte@dps.state.ia.us>
Sent:	Saturday, June 25, 2022 10:49 AM
То:	DAVID GORDON; ISICSNOC; stormlake
Cc:	Tad Keller; Jonathon Neal; Dan Chigi; Steven Pyle; DAVID GORDON
Subject:	RE: ** External Email Alert ** Jones Notam

DONE

From: Dave Gordon <dave.gordon@motorolasolutions.com>

Sent: Saturday, June 25, 2022 10:18 AM

**To:** ISICSNOC <ISICSNOC@DPS.STATE.IA.US>; stormlake <stormlake@dps.state.ia.us>

**Cc:** Tad Keller <thaddeus.keller@motorolasolutions.com>; Jonathon Neal <jonathon.neal@motorolasolutions.com>; Dan Chigi <danchigi@motorolasolutions.com>; Steven Pyle <steve.pyle@motorolasolutions.com>; DAVID GORDON <dave.gordon@motorolasolutions.com>

Subject: \*\* External Email Alert \*\* Jones Notam

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Good Morning Storm Lake,

Please have someone open a NOTAM for the Jones tower.

Motorola Incident # 6244959

Jones ASR # 1304711

Duration: 5 weeks

A technician was on site and found water in the light controller box. The controller has been powered off to prevent any further damage. We will have to contact Flash Technology on Monday to troubleshoot the water damage.

Captain Pierce,

This appears to be storm damage.

Please contact me with any questions.

Thanks,

Dave Gordon Customer Support Manager Motorola Solutions, Inc.

State of Iowa

M: +1.319.321.1134 E: dave.gordon@motorolasolutions.com

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From:	DAVID GORDON <dave.gordon@motorolasolutions.com></dave.gordon@motorolasolutions.com>
Sent:	Wednesday, July 13, 2022 8:46 AM
То:	ISICSNOC; Gray, Steven; Knoll, Douglas; Huffman, Peter; Curtis Walser
Cc:	Jonathon Neal; Tad Keller; Dan Chigi; Steven Pyle; Chad Menke; Pat Strizek; Chad Gappa;
	DAVID GORDON
Subject:	** External Email Alert ** Jones Update

**\*\*External Email Alert**\*\* This email is from outside DPS. **DO NOT CLICK** links or attachments unless you expected them. If unsure please forward to <u>ITOC@dps.state.ia.us</u> for review.

#### Good Morning,

We had the tower crew on site at Jones yesterday. They were able to replace the TTA and the two primary microwave ODU's to Maquoketa and Cedar Rapids.

Around 8:15pm we were able to get the site back up in wide trunking.

There are several things we still need to do at the site.

### MOSCAD Alarms

Currently the MOSCAD alarms are not working. We tried several loaner SDM3000's but could not get them to work. Jon is picking up the one that was removed and stored at Hooper today and we will try it. We do have a new one on order but awaiting ship dates for it.

#### Microwave

As mentioned, the primary microwave links from Jones to Maquoketa and Cedar Rapids are up and working. They replaced the damaged ODU's and RAC cards.

We are working on a plan for the secondary microwave ODU's with Aviat. This will require a tower climb. We will plan to do this work and replace the Transmit antenna when we get the plan locked down.

#### Transmit Antenna

The tower crew did find that the Transmit Antenna was hit by lightning and will need to be replaced. We did radio tests and it appears the site is working fine with the damaged antenna currently. This will require getting a spare antenna to the site and replaced by the tower crew.

#### Tower Lights

Flash Technology indicated they will be shipping the new tower light controller box later this week.

The team will be back on site working on the MOSCAD and some other misc clean up today.

Once we can get the plan established to replace the secondary ODU's and Transmit antenna, we will let you know.

Please let me know if you have any questions.

Thanks,

--Dave Gordon Customer Support Manager Motorola Solutions, Inc. State of Iowa

M: +1.319.321.1134 E: <u>dave.gordon@motorolasolutions.com</u>

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