



Emergency Management
NC DEPARTMENT OF PUBLIC SAFETY



Secure communication to an Emergency Operations Center (EOC) from a field site via MS TEAMS

FEMA & NC Government Sector UAS Working Group Tuesday, 25 July 2023

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FIMAN Tech & Remote Pilot**



Directions on how to stream from your UAV's tablet controller via MS TEAMS

- A. Install MS TEAMS on your computer and UAV's tablet controller
- B. Create an MS TEAMS meeting on your computer or tablet controller
 1. Go to Calendar
 - a. **Computer:**
 - 1). Press the **[+ New meeting]** button, which is located in the upper right corner. Alternatively, press the down arrow to the right of the **[+ New meeting]** button and then press the **"Schedule meeting"** option.
 - 2). Fill out the form's requested info
 - Title
 - Required attendees
 - Starting date and time; Ending date and time
 - 3). Press the form's **[Send]** button.



Search



Calendar

Join with an ID

Meet now

+ New meeting

Schedule meeting

Live event

Webinar

Press

Today < > July 2023

17
Monday

18
Tuesday

19
Wednesday

20
Thursday

21
Friday

8 AM

9 AM

10 AM

11 AM

12 PM

1 PM

2 PM

3 PM

NCDOT UAS
Hurricane Training
?

[External] Bi-
<https://fema.zoom>

Gauge maintenance and installation
update
Microsoft Teams Meeting



New meeting

New meeting Details Scheduling Assistant

Send **Press**

Show as: Busy Category: None Time zone: (UTC-05:00) Eastern Time (US & Canada) Response options Require registration: None

UAV streaming demo

N NCEOC Free TC Thomas Covington Free + Optional

7/21/2023 1:00 PM → 7/21/2023 3:00 PM 2h All day

Suggested: 2:00 PM-4:00 PM

Fill in the necessary info on the form

Does not repeat

Add channel

Add location Online meeting

B *I* U ~~S~~ |

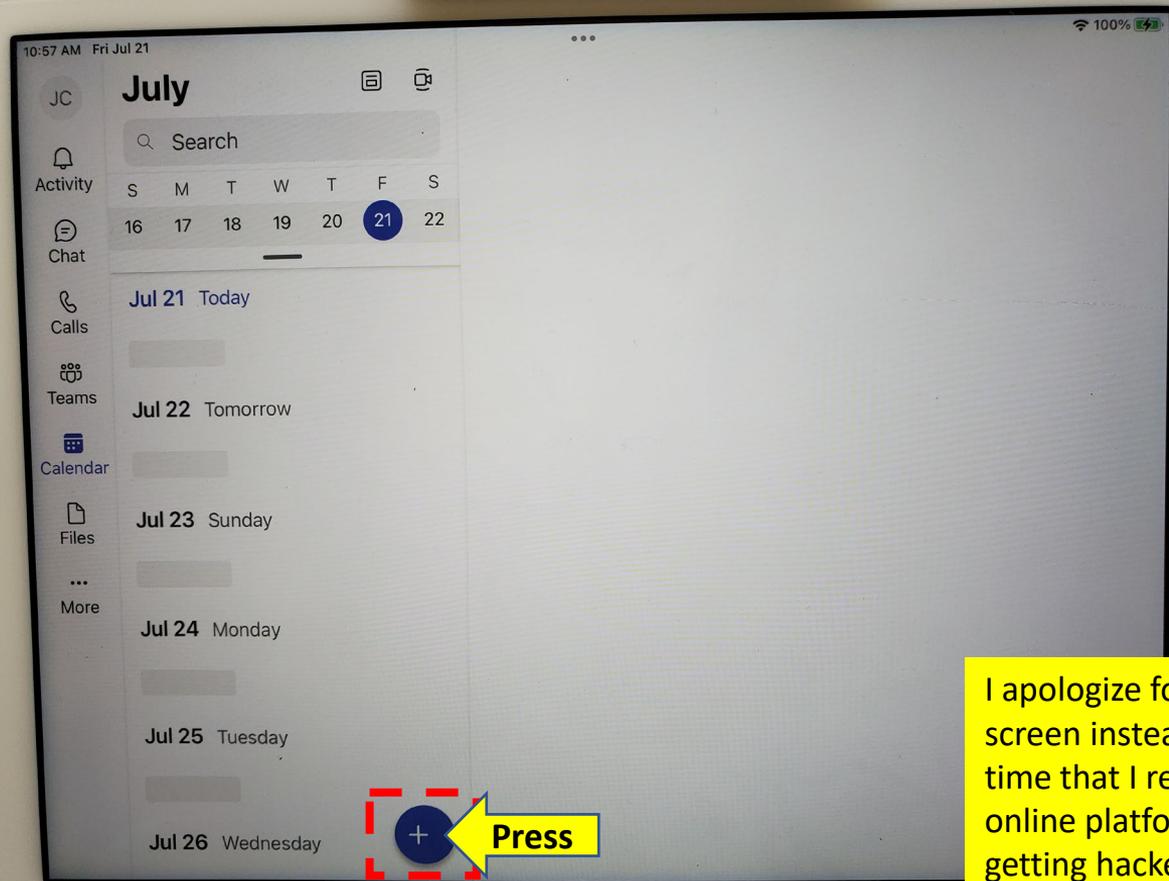
Paragraph

Type details for this new meeting

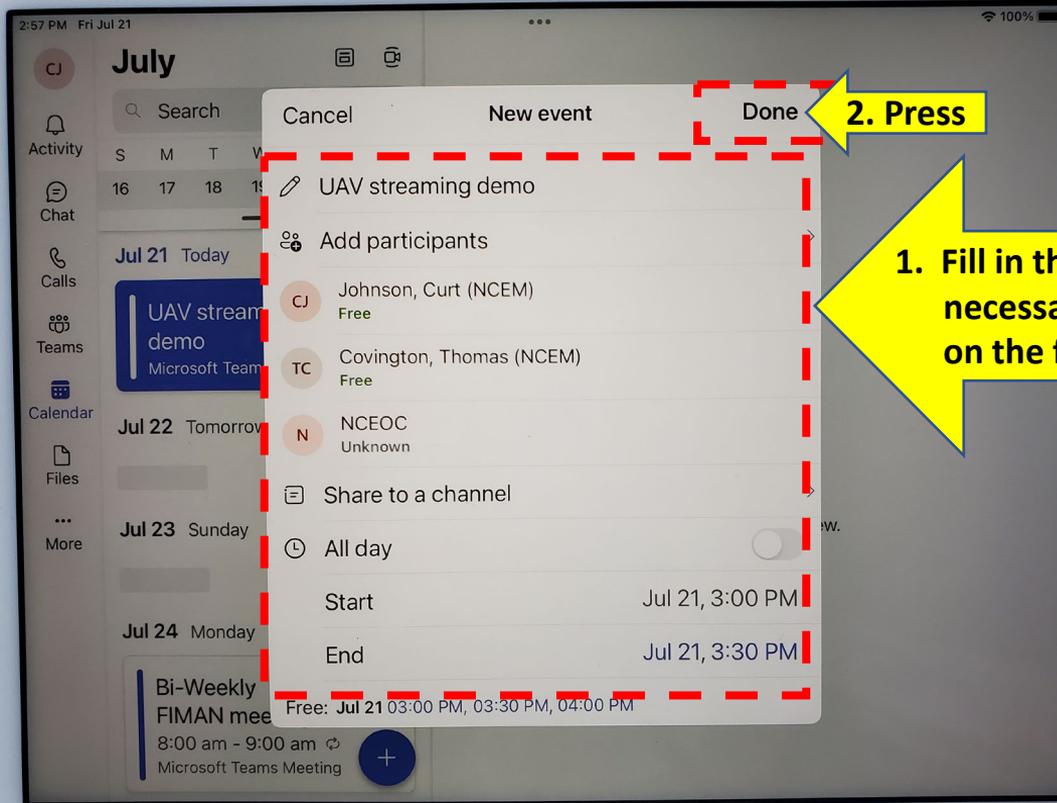


Directions on how to stream from your UAV's tablet controller via MS TEAMS

- A. Install MS TEAMS on your computer and UAV's tablet controller
- B. Create an MS TEAMS meeting on your computer or tablet controller
 1. Go to Calendar
 - a. **Tablet:**
 - 1). Press the **[+]** button, which is located in the lower left corner.
 - 2). Fill out the form's requested info:
 - Title
 - Required attendees
 - Starting date and time; Ending date and time
 - 3). Press the form's **[Done]** button.



I apologize for using photos of the tablet's screen instead of screenshots. The last time that I retrieved files from the tablet's online platform resulted in my credit card getting hacked.



2. Press

1. Fill in the necessary info on the form



Directions on how to stream from your UAV's tablet controller via MS TEAMS

C. Start the MS TEAMS meeting

1. Go to Calendar
 - a. **Computer:**
 - 1). Press the calendar entry's **Join** button.
 - 2). Press the **Join now** button.



Calendar interface showing a weekly view for July 2023. The interface includes a search bar, navigation icons, and a list of calendar events.

Calendar Header: Search, # Join with an ID, Meet now, New meeting, Work week

Calendar Grid:

	17 Monday	18 Tuesday	19 Wednesday	20 Thursday	21 Friday
8 AM				NCDOT UAS Hurricane Training ?	
9 AM					
10 AM					[External] Bi- https://fema.zox
11 AM		Gauge maintenance and installation update Microsoft Teams Meeting			
12 PM					
1 PM					UAV streaming demo Microsoft Teams Meeting Johnson, Curt (NCEM)
2 PM					
3 PM					

Annotations:

- A red vertical bar highlights the Thursday, July 20th column.
- A yellow arrow labeled "Press" points to the "Join" button of the "UAV streaming demo" meeting on Friday, July 21st.



UAV streaming demo

Choose your video and audio options


Your camera is turned off

  Video effects 

 Computer audio

Custom Setup 

 Phone audio

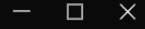
 Room audio

 Don't use audio





UAV streaming demo



00:07



Chat



People



Raise



React



View



Rooms



Apps



More



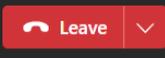
Camera



Mic



Share



Leave



Waiting for others to join...



Directions on how to stream from your UAV's tablet controller via MS TEAMS

C. Start the MS TEAMS meeting

1. Go to Calendar

a. **Tablet:**

- 1). Press the calendar entry's **Join** button.
- 2). Press the **Join now** button.



11:16 AM Fri Jul 21

July

Search

Activity

S	M	T	W	T	F	S
16	17	18	19	20	21	22

Chat

Calls

Teams

Calendar

Files

More

UAV streaming practice
11:20 am - 1:20 pm
Microsoft Teams Meeting
4 MINS

Jul 21 Today

Jul 22 Tomorrow
No meetings

Jul 23 Sunday
No meetings

Jul 24 Monday
Bi-Weekly FIMAN meeting
8:00 am - 9:00 am

UAV streaming practice

Chat

Details

Apps

UAV streaming practice
Friday, July 21, 2023
11:20 am - 1:20 pm
Microsoft Teams Meeting

Share meeting invite

+1 984-204-1487 (Toll) United States

Join ← **Press**

Microsoft Teams meeting Join on your computer, mobile app or room device Click here to join the meeting Meeting ID: 213 403 176 512 See more

Participants (2)

- CJ Johnson, Curt (NCEM) Organizer
- TC Covington, Thomas (NCEM) Unknown

Meeting options

Forward meeting

Cancel event



11:16 AM Fri Jul 21

100%

UAV streaming practice

Background effects

CJ

Video is off Mic is off Speaker

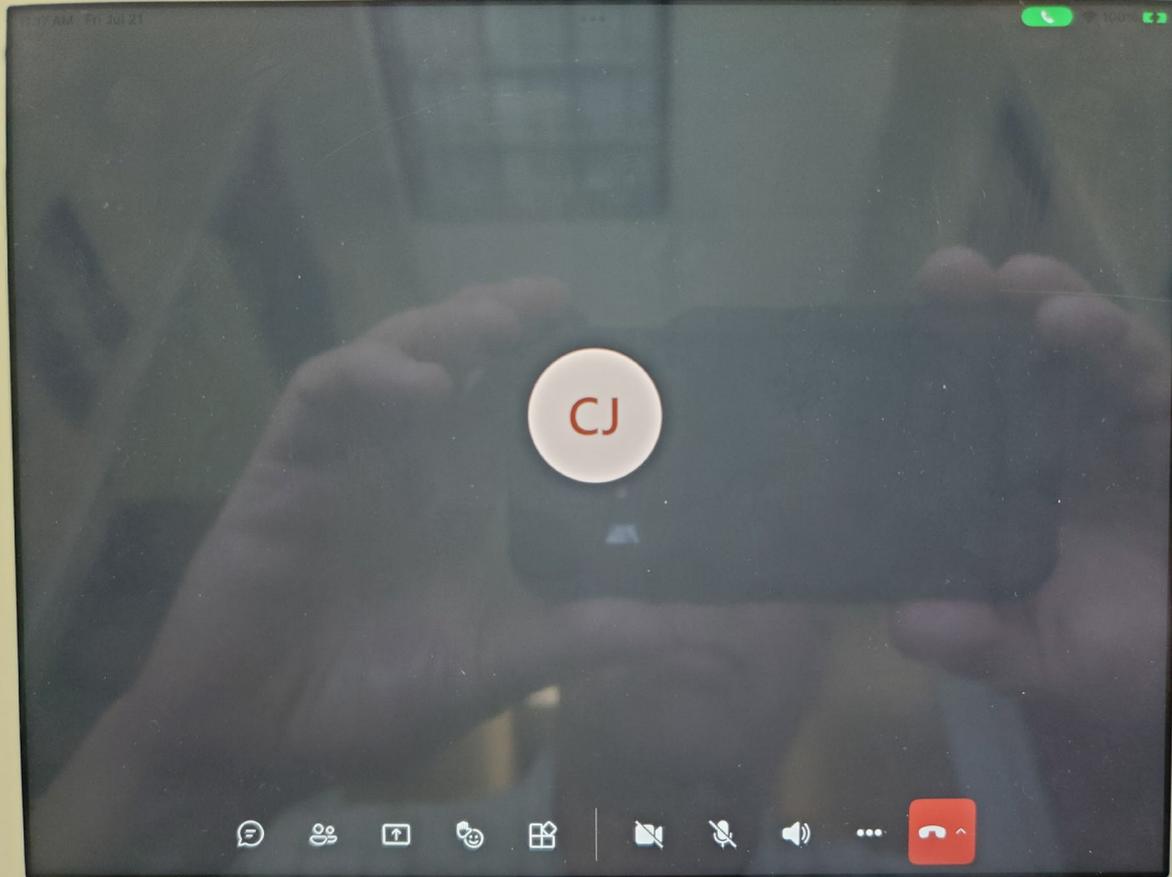
Join now **Press**

More join options

The image shows a mobile app interface for a video stream titled "UAV streaming practice". At the top, it shows the time "11:16 AM Fri Jul 21" and battery status "100%". A central overlay displays "Background effects" and a large circular button with the initials "CJ". Below this are three status indicators: "Video is off", "Mic is off", and "Speaker". At the bottom, there is a "Join now" button with a red dashed border, and a yellow arrow pointing to it with the word "Press" in black text. Below the "Join now" button is the text "More join options".



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Directions on how to stream from your UAV's tablet controller via MS TEAMS

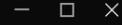
D. Add another device:

If you first started the MS TEAMS meeting on your tablet and are now trying to start the MS TEAMS meeting on your laptop or vice versa, you will need to add the second device

1. Computer or tablet
 - a. Press the **[Add this device]** button.



UAV streaming demo



**You're already in this meeting on
another device.**



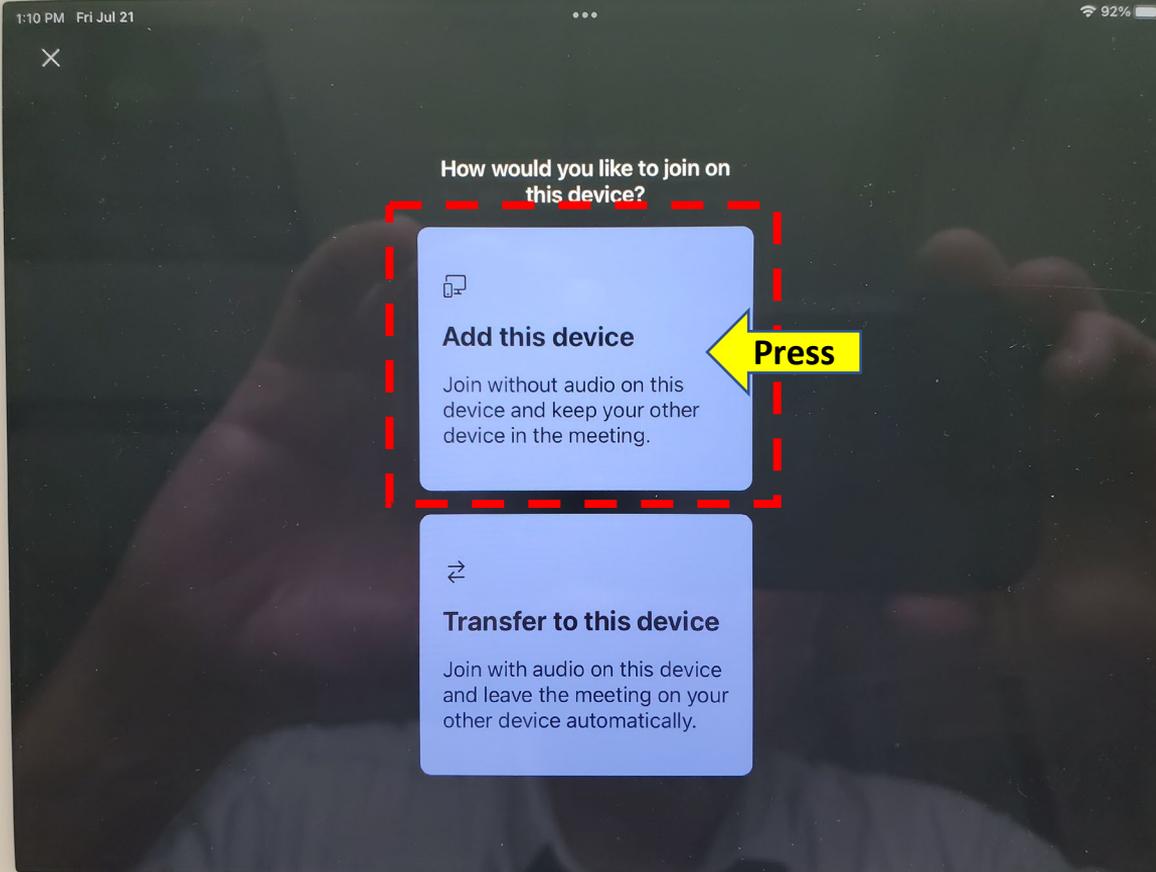
Add this device

Join muted and keep your other device in the meeting.



Transfer to this device

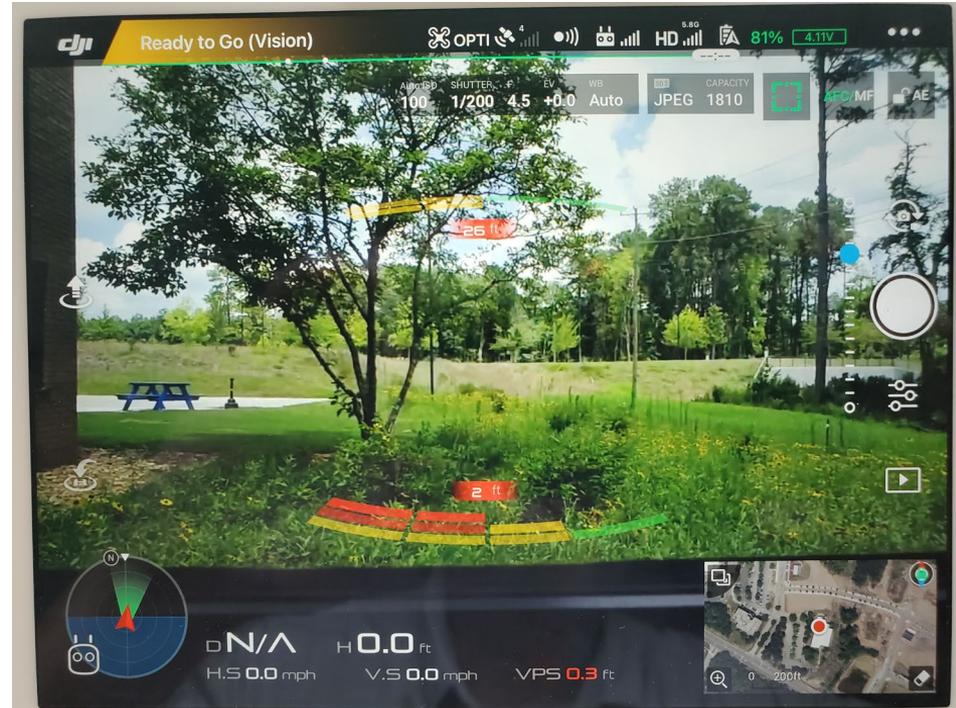
Use this device for the meeting instead.





Directions on how to stream from your UAV's tablet controller via MS TEAMS

- E. Start your UAV's controller and UAV
 1. On an iPad, press the home key twice.
 2. Start the UAV's controller app.
 3. Start the UAV.





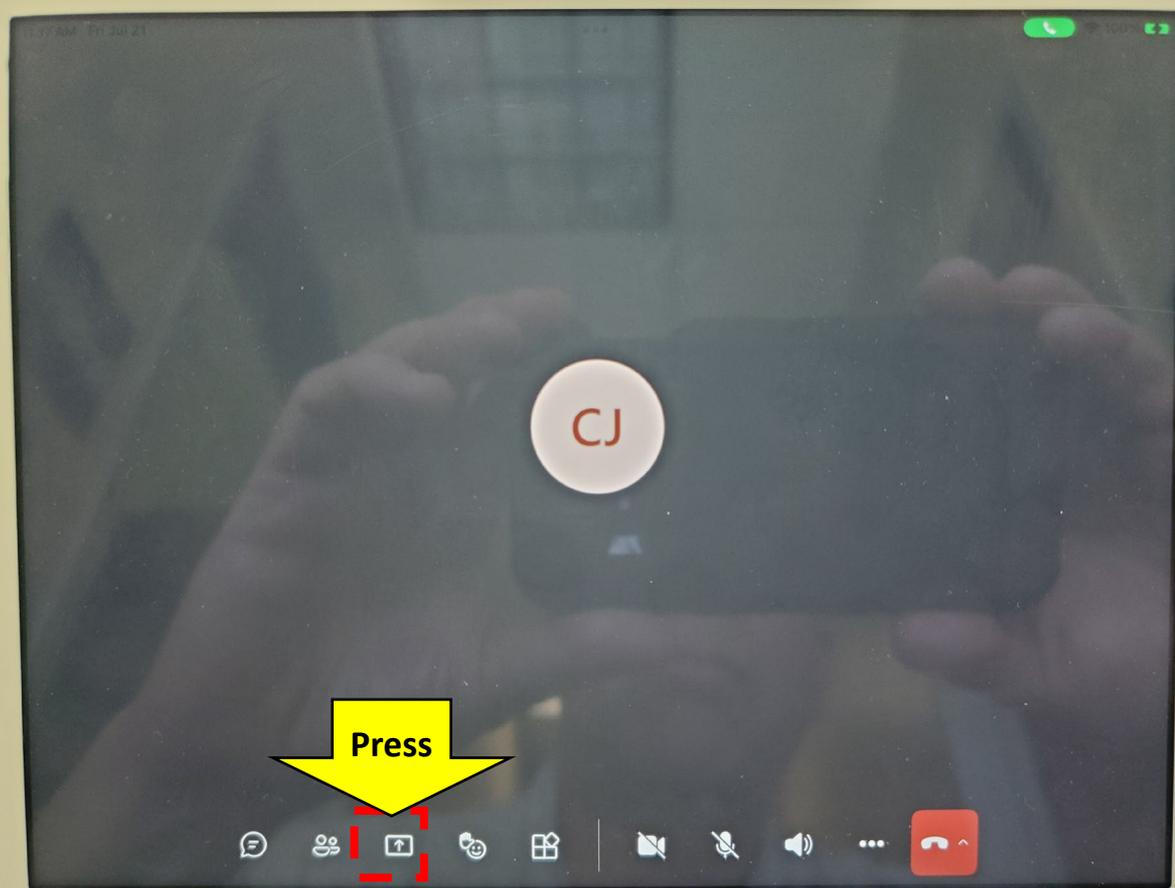
Directions on how to stream from your UAV's tablet controller via MS TEAMS

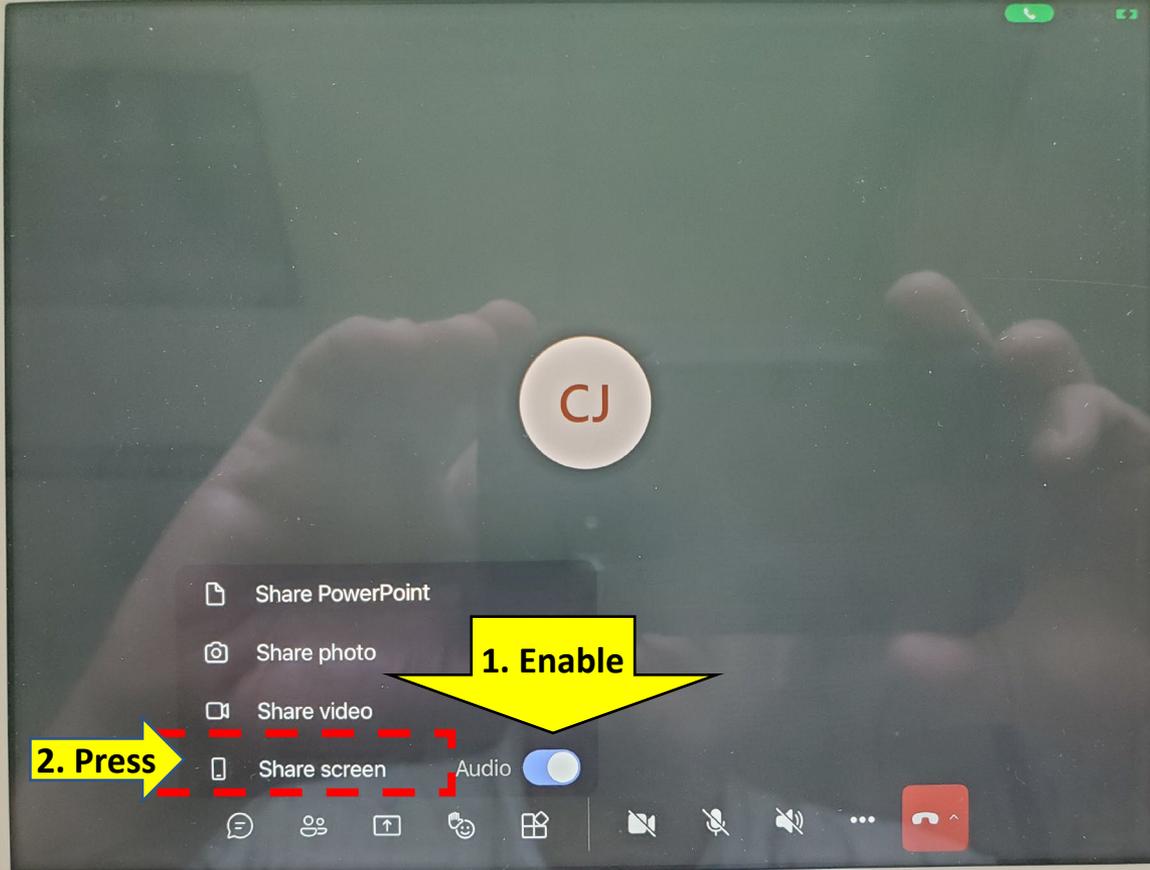
F. Go back to MS Teams

1. On an iPad, press the home key twice.
2. Select the MS TEAMS thumbnail.
3. Press the **[Share]** button, which is a rectangle with an arrow pointing upwards
 - a. Enable the **“Audio”** option in the **[Share screen]** option and then select the **[Share screen]** option
Note: You can always mute later. Conversely, don't enable the **“Audio”** option. You can always unmute later.
 - b. In the **“Screen Broadcast”** dialog box
 - 1). Press the **[Start Broadcast]** button, which will invoke a short (generally 3 second) countdown.
 - 2). Once the countdown is over the white circle at the top of the dialog box will turn red and a **“You are sharing your screen now”** notification will appear at the top of the screen.
 - 3). Tap the screen, which will take you back to the TEAMS screen.
 - 4). Note the **[Stop presenting]** button at the bottom the screen.



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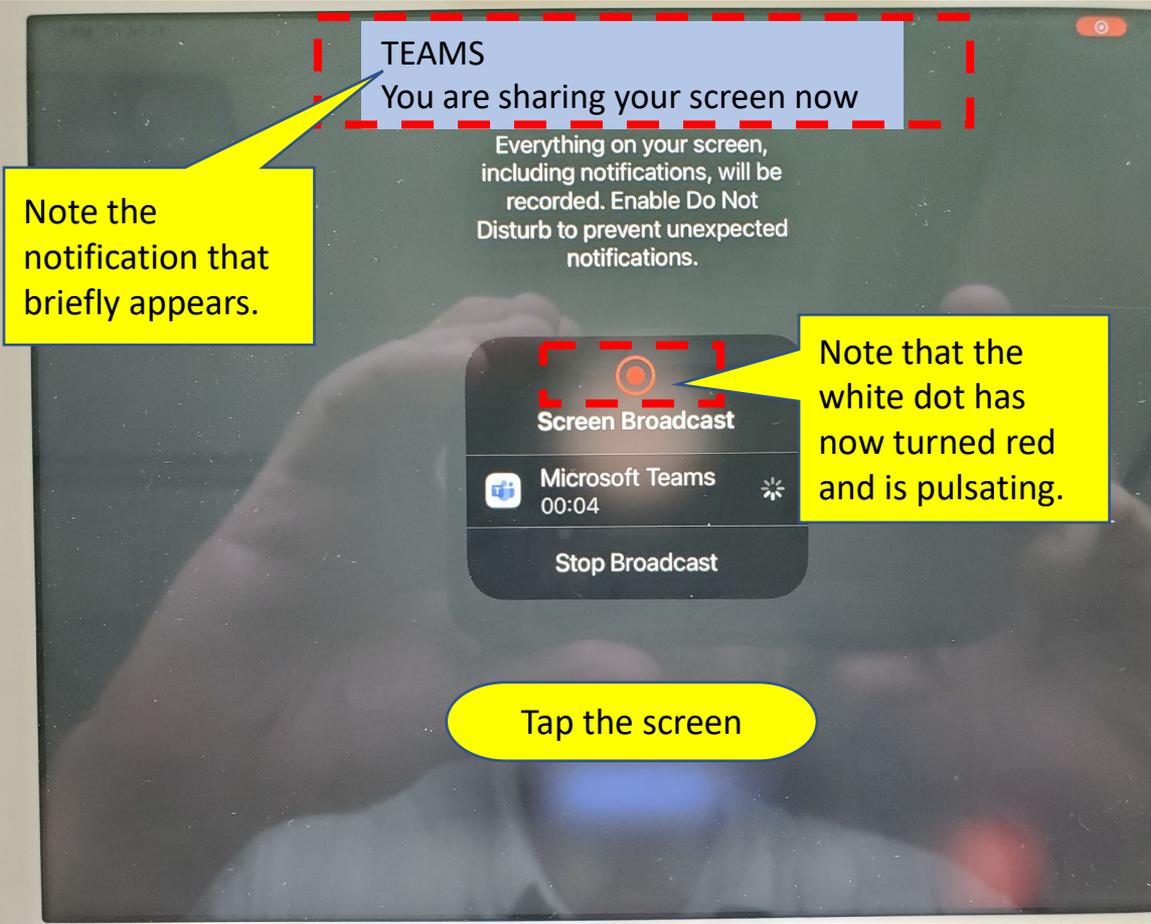






Everything on your screen,
including notifications, will be
recorded. Enable Do Not
Disturb to prevent unexpected
notifications.

A screenshot of an iOS 'Screen Broadcast' menu. The menu is a dark rounded rectangle with a white circle icon at the top. Below the icon, the text 'Screen Broadcast' is displayed. Underneath, there is a list item for 'Microsoft Teams' with a checkmark to its right. At the bottom of the menu is the 'Start Broadcast' option, which is highlighted with a red dashed border. A yellow arrow with the word 'Press' in black text points to the 'Start Broadcast' option.



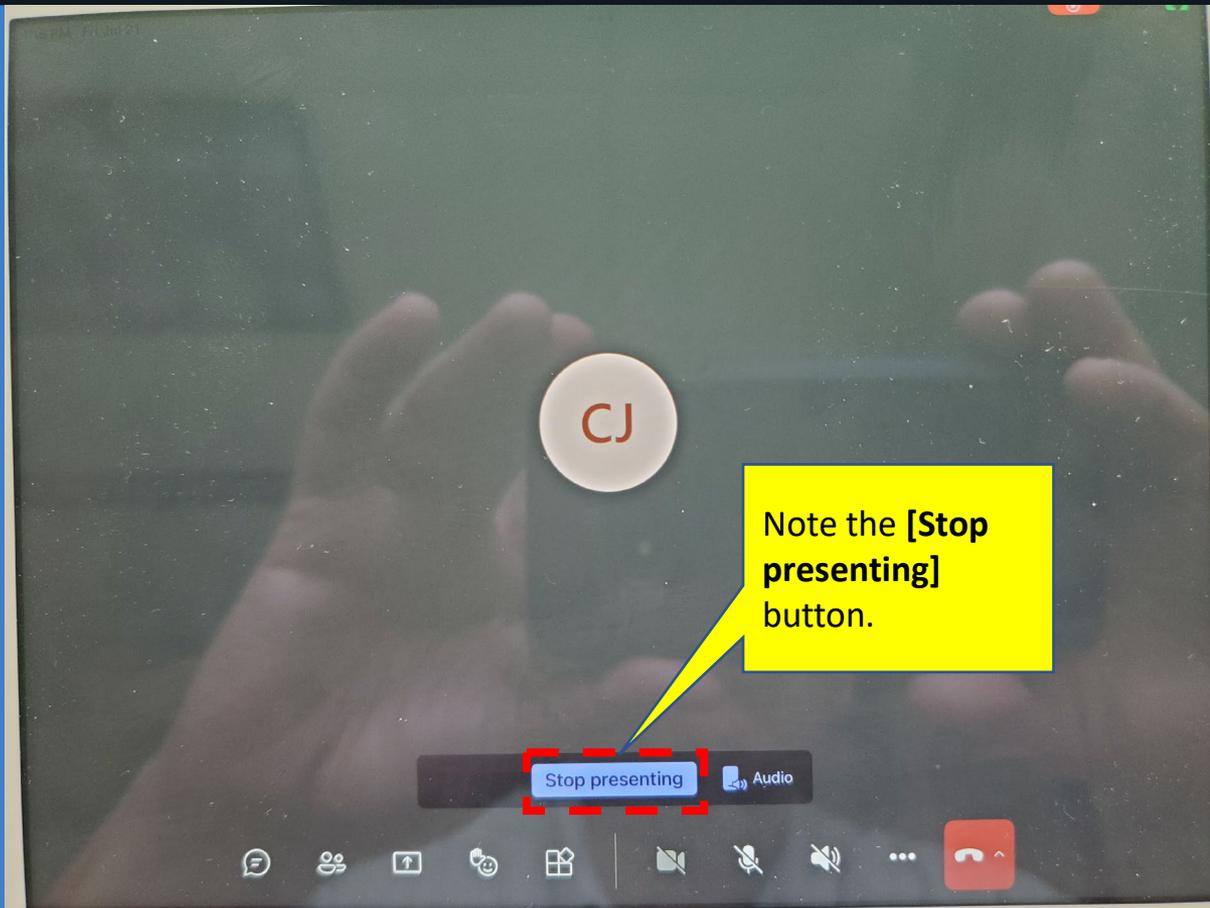
TEAMS
You are sharing your screen now

Everything on your screen, including notifications, will be recorded. Enable Do Not Disturb to prevent unexpected notifications.

Note the notification that briefly appears.

Note that the white dot has now turned red and is pulsating.

Tap the screen

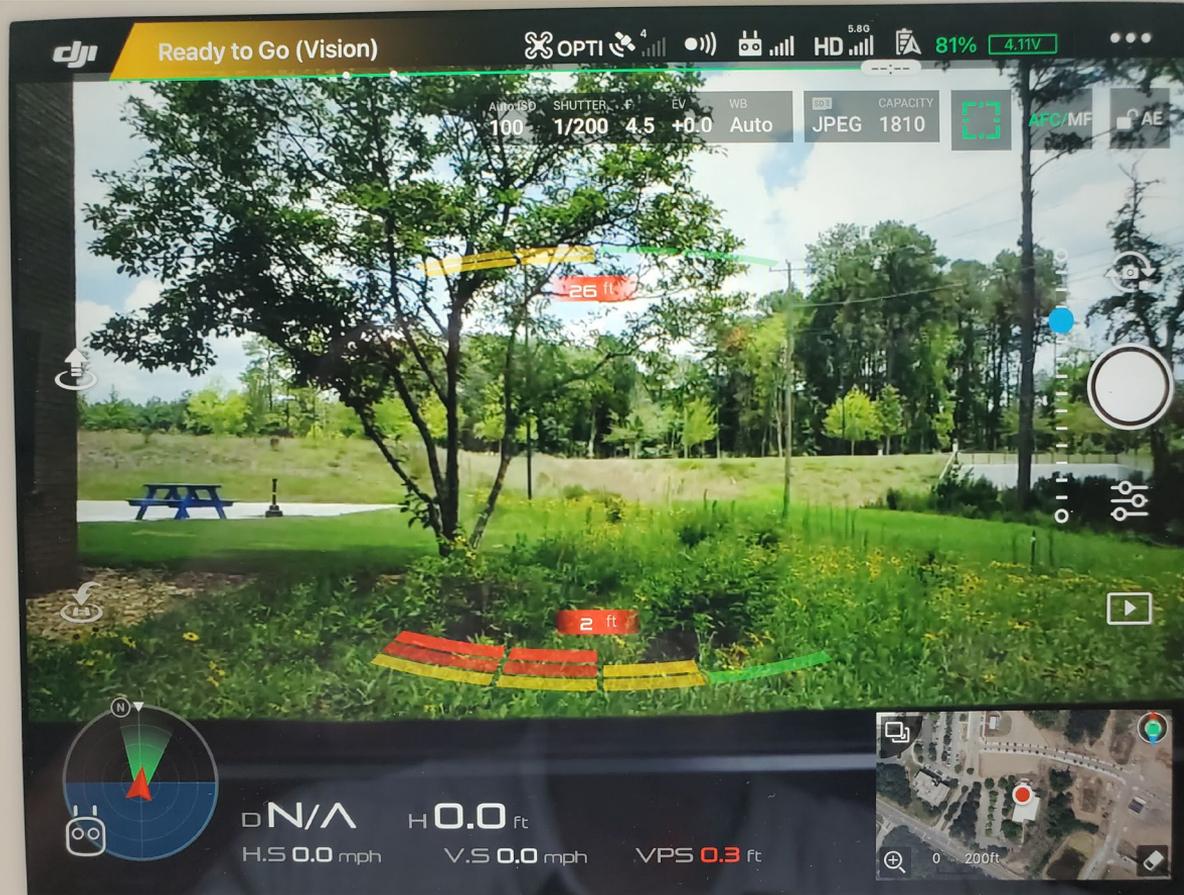




Directions on how to stream from your UAV's tablet controller via MS TEAMS

G. Go back to the UAV controller app

1. On an iPad, press the home key twice.
2. Select the UAV controller app's thumbnail.
3. Congratulations!!! You are now broadcasting via MS TEAMS!!!





UAV streaming demo

10:13

Chat People Raise React View Rooms Apps More Camera Mic Share Leave

DJI Ready to Go (Vision)

OPTI 4 5.8G HD 79% 4.09V

Auto ISO 100 SHUTTER 1/200 F 4.5 EV +0.0 WB Auto JPEG 1810 AF-C/MF AE

26 ft

9 ft

D N/A H 0.0 Ft
H.S 0.0 mph V.S 0.0 mph VPS 0.3 ft

**Congratulations!!!
You are now
broadcasting via MS
TEAMS!!!**





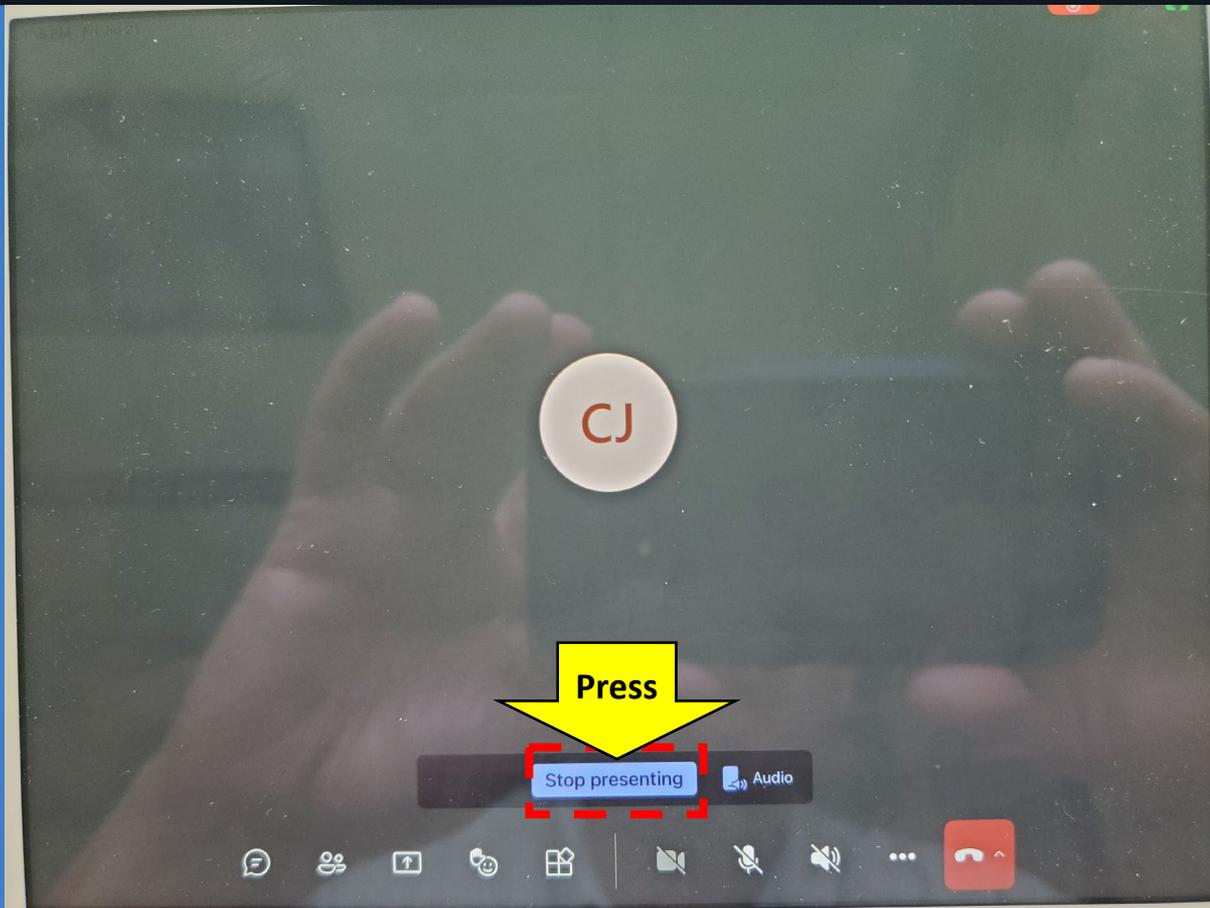
Directions on how to stream from your UAV's tablet controller via MS TEAMS

H. When you want to stop broadcasting:

1. On an iPad, press the home key twice.
2. Select the MS TEAMS app's thumbnail.
3. Press the **[Stop presenting]** button at the bottom the screen.



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Questions

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