

# Operations Plan



## **2D & 3D Rapid Collection Imagery Testing 9 OCT 2020 – 26 SEP 2021**

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## 1. General

### Imagery Evaluation for GEO/GIS consumption

Testing Flights of fixed wing platforms to determine best camera settings and profiles for flights that produce imagery that can be consumed by GIS systems.

Testing of existing VIRB, and GoPro camera options to determine feasibility for use as a method to collect imagery that can be mosaiced into a 2D geotiff for use by GIS / FEMA others in initial disaster response. If practical this would allow for wings to immediately start collection of 2D imagery for damage assessment. Multiple test flights over same physical points on ground with Fixed wing AP camera's and WALDO camera. Output of imagery will be loaded into GIS applications for testing to determine optimal camera (VIRB, NIKON, and GoPro). We are hopeful to determine the viability of doing a 2D georeferenced map utilizing the equipment we have. We will also look at a limited number of options to add capability to the existing equipment in the field to be able to attain the desired results.

The team will also look at ways to refine 3D processing using WALDO air and ground systems.

a. Incident Command Post

Denton County Airport  
9 October 2020 through 26 September 2021

b. Primary dates & times

The mission will be authorized to open on 9 October 2020 and close on 26 September, KDTO airport and surrounding area's. Daylight sun angle of 30 degrees is required, Sunrise + 2 hours to 2 hours prior to Sunset daily.

Pre-positioning flights will contact the IC for approval prior to movement, only the IC or designee may release a flight for this event.

Incident Command Post staff briefing will be prior to each operational event. Mission will open for positioning of resources on 9 October 2020 and close on 26 September 2021.

c. Alternate dates

N/A

d. NHQ funding

This mission is funded by AF Training.

e. Mission Symbol

A5

f. Project Officer/Incident Commander

CAP Incident Commander/Program Manager:  
Eric Templeton, CAP NHQ  
Email: etempleton@capnhq.gov  
Phone: 630-261-5873 (C)

g. Other Contacts

NA

## 2. Application

a. Qualification requirements

Attendees shall be active CAP members with a valid CAP ID card in their possession, and present in a correctly worn CAP uniform. All members must have completed General Emergency Services and Basic ORM and have those noted in eService Operations Qualifications to participate in the event. Any member not

having those basic qualifications will not be allowed to sign into the mission and will not be covered under CAP or USAF insurance. All Pilots will arrive with current Form 5 and 91 evaluations good for the duration of they're attendance. Personnel participating as aircrew members will either be properly qualified or be a supervised trainee in accordance with CAPR 60-3.

b. Event capacity

The IC will determine the personnel needed to support each mission event.

c. Event enrollment procedures

Members who wish to participate are requested to contact the Project Manager in advance of the event.

### 3. Flight Operations

a. Aircrew Requirements:

- i. An Aircrew consists of a qualified Mission Pilot (MP) and Mission Observer (MO). Two MPs may be used as a crew.
- ii. The operational week is Sunday through Saturday. The aircrews are expected to commit for a day of activity.

b. Aircrew Training Requirements:

- i. The MP must complete the following training tasks:
  - Hold a current or be able to gain an AP rating.
- ii. The MO must complete the following training tasks:
  - Hold a current or be able to gain an AP rating.

c. Flight Operations

- i. All flight operations will be over land.
- ii. All imagery flight operations will be done during daylight hours.
- iii. Flight operations will generally consist of several short sorties to determine the best camera settings to accomplish the mission.

d. Mission-Specific Requirements

- i. NA

e. Basic Operational Elements

- i. The basic concept of imagery testing operations will be divided into the following areas:
  - Mission preflight planning and briefing
  - Camera setup and mounting to aircraft
  - Imagery collection flight
  - Imagery post flight uploading
  - Review of post flight imagery collection
  - Mission debriefing

#### 4. Administration

a. Inbound/ Outbound sorties

- i. While not anticipated if needed, Inbound/outbound sorties are approved by the Incident Commander or their designee. Transport crews for each aircraft must be coordinated with the IC no later than three weeks prior to the event. You may not fly without an ELECTRONIC flight release. Please remember only the Wing Commander or their designated representatives can override disqualifications in eFlight Release.

b. Sortie Management

All sorties must be released in WMIRS electronically only by the IC or designee. FRO qualifications are required if you are not acting as an IC.

Sortie close-out data will be entered in WMIRS as soon after landing as practicable. Receipts must be uploaded within 48 hours or the expense will not be paid. **IMPROPERLY RELEASED SORTIES WILL NOT BE FUNDED BY THIS EVENT.**

c. Safety considerations

The IC or designee will cover all safety points upon release of the sortie, including the safe operations by aircrew and flightline personnel in the performance of their flying duties. **NO PASSENGERS WILL BE SWAPPED WITH THE AIRCRAFT ENGINE RUNNING!**

d. Mission paperwork

- i. Crews for both airplanes and vehicles are responsible to ensure fuel receipts, RM sheets, Weight and Balance sheets for airplanes and CAP Form 108 & 109's are provided to the IC for the event. He/she will ensure that fuel receipts, RM sheets, Weight and Balance and CAP Forms, if not on WMIRS, are captured and uploaded for each sortie for inclusion in WMIRS, in a timely manner.

- ii. Aircraft will be refueled as necessary during the day but at least at the end of each days flying and must be noted on the CAPF104 in WMIRS. Inbound and related forms WILL be provided to the IC within 4 hours of arrival at KEFD.

- iii. Crews will NOT be released for subsequent sorties until all paperwork required for each sortie has been submitted and approved.

- iv. PILOTS ARE RESPONSIBLE FOR OBTAINING FUEL RECEIPTS AND COMPLETING AND SUBMITTING A TXWG FUEL USEAGE FORM TO THE IC. FAILING TO DO SO WITHIN 48 HOURS OF SORTIE COMPLETION MAY RESULT IN THE PILOT BEING RESPONSIBLE FOR PAYMENT OR REIMBURSEMENT OF FUEL FOR ANY SORTIE NOT PROPERLY DOCUMENTED AND REPORTED TO THE IC.

e. Daily SITREPS

- i. SITREPS will be sent to [OPSCENTER@capnhq.gov](mailto:OPSCENTER@capnhq.gov) at the completion of EACH DAY'S activity for the mission as well as to CAP-USAF/DOT, Mr. Dave Reichert, [david.reichert.1@us.af.mil](mailto:david.reichert.1@us.af.mil), as this is an NHQ approved mission.
- ii. SITREPS will include at a minimum the following:
  - a) IC's name, Rank/Grade, CAPID, cell phone number and email address
  - b) Narrative summary of activities within the last 24 hours, identifying objectives met and remaining.
  - c) Counts of CAP personnel, aircraft, and ground vehicles that supported the mission within the last 24 hours.
  - d) Number of air sorties flown and hours flown.
  - e) Number of ground sorties accomplished.

- f) Narrative summary of any issues impacting mission accomplishment.
- g) Resource status summary of critical resources to the mission; anticipate providing table(s) of specific aircraft, vehicles, and sensor with their current location and status (Fully Mission Capable (FMC), Partially Mission Capable (PMC) or Not Mission Capable (NMC) with explanatory notes as necessary.
- h) Narrative summary of activities planned for the next 48 hours.

## 5. Communications

### a. Requirements

Communication between the aircrews, ground teams and IC will make use of telephone, email, text messaging or radio.

### b. Procedure

The ICP will have and maintain communications equipment for use during the entire event. All sorties will remain in contact with the ICP.

### c. Required Equipment

- i. All aircraft must have an operational VHF-FM aircraft radio. Use of an aircraft without an operational VHF-FM radio requires advance approval of the IC.
- ii. Ground teams should have VHF communication capability.
- iii. All operational sorties (air or ground) should have at least one cell phone and that number must be available in the ICP.

## 6. Cadet Participation

Are encouraged to participate in AP work, and training in testing of camera platforms.

Example: No cadets are expected to be participating in this mission.

## 7. Safety

### a. ORM forms will be used at all levels of the event:

- i. ICP – CAPFs 160 Deliberate Risk Assessment Worksheet, 160HL Hazard Listing Worksheet and/or 160S Real Time Risk Assessment Worksheet, will be completed for the Incident Command Post.
- ii. Operational Air Sorties – AIF RAW Aircrew must be completed in WMIRS as noted in Section 5, subsection i above.
- iii. Operational Ground Sorties – Hazards will be documented on the sortie within WMIRS.

### b. All CAP operations involve some degree of risk. Participants must be alert and careful when operating aircraft or ground vehicles.

### c. The IC will continually monitor all operations to ensure safety is not just talked about, but actually done correctly.

### d. Any mishaps that occur on the mission will be reported IAW CAPR 160-2.

## 8. Staff Requirements

### a. CP Staff members will be fully qualified or will be supervised by qualified members.

### b. The following Incident Command staff are required:

- i. Incident Commander (IC)

- ii. Project Officer (PO)
  - iii. FRO
  - iv. Any additional support staff as required by PO or IC
- c. CAP NHQ will assign a Program Manager/Project Officer to oversee these operations.
- d. Standby aircrew and members may perform other duties to assist and may include but not limited to: backfilling in the case of illness, a second instrument pilot for night overwater operations, relieve other crewmembers at the site, ground observer to assist the ANG, crew transport, and general support.

## 9. Uniform Requirements

All attendees must be in an authorized and complete **CAP** uniform worn in accordance with CAP regulations. Each member's role should dictate the appropriate uniform. Mission Staff may be in a service or utility uniform depending on the level of contact expected with external participants or media.

## 10. Facilities

N/A.

Air National Guard Facilities at KEFD have been approved for this event.

## 11. Logistics

- a. Billeting  
NA
- b. Messing  
NA
- c. Medical  
Local medical facilities and by emergency number 911.
  - i. Ambulatory patients may be transported to facilities by CAP vehicle. All other transport should be arranged by calling 911. Care-flight is available for aero-medical transport.
- d. Police and Fire  
Local facilities and by emergency number is 911.

## 12. Military Support Requirements

NA

## 13. Public Affairs

- a. Media Contact  
NA
- b. Internal  
NA
- c. External  
NA

#### **14. Contingencies & Emergency Services Missions**

Example: Any event may be suspended or terminated and CAP resources reassigned, at the direction of an active Emergency Services Mission Incident Commander, CC, or Higher Headquarters CAP or CAP-USAF direction; otherwise, the event is expected to continue as planned.