



**AGREEMENT FOR UNMANNED AIRCRAFT SYSTEMS  
FOR THE BILLINGS FIRE DEPARTMENT**

**THIS AGREEMENT** is made and entered into \_\_\_\_\_, by and between the **CITY OF BILLINGS, MONTANA**, a municipal corporation organized and existing under the laws of the State of Montana, P.O. Box 1178, Billings, Montana 59103, hereinafter referred to as "**CITY**," and **STEEL CITY DRONES, LLC**, of 282 Foxcroft Road, Pittsburg, PA 15220, hereinafter referred to as "**CONTRACTOR**."

In consideration of the mutual covenants and agreements herein contained, the receipt and sufficiency whereof being hereby acknowledged, the parties hereto agree as follows:

1. **PURPOSE:** **CITY** agrees to hire **CONTRACTOR** as an independent contractor to provide all necessary equipment, setup, and training for the Fire Department's deployment of an Unmanned Aircraft Systems program, more accurately described in the Product and Services Specifications, attached hereto as Exhibit "A" and by this reference made a part hereof.
2. **EFFECTIVE DATE:** This **AGREEMENT** is effective upon the date of its execution and will terminate on June 30, 2023. The parties may extend this **AGREEMENT**, by mutual concurrence, for one (1) year, in writing prior to its termination.
3. **SPECIFICATIONS:** The **CONTRACTOR** shall provide the products and perform the services outlined in Exhibit "A". In performing these services, the **CONTRACTOR** shall at all times comply with all federal, state and local statutes, rules and ordinances applicable. These services and all duties incidental or necessary therefor, shall be performed diligently and completely and in accordance with professional standards of conduct and performance.
4. **INCORPORATION BY REFERENCE:** All exhibits and addenda attached hereto, as well as any bid or proposal referenced, are hereby incorporated into this **AGREEMENT** and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this **AGREEMENT**, the terms of this **AGREEMENT** shall control.
5. **PAYMENT:** **CITY** agrees to pay **CONTRACTOR** \$230,049.00 for the products and services described in Exhibit "A". Any alteration or deviation from the described work that involves extra costs will be executed only upon written request by the **CITY** to **CONTRACTOR** and will become an extra charge over and above the contract amount. The parties must agree upon any extra charges in writing.



Except as otherwise specified herein, the **CONTRACTOR** shall invoice the **CITY** for all products and services rendered pursuant to this **AGREEMENT**. Such invoices shall specify the services provided to the **CITY**, identify the applicable fees, and shall be accompanied by reasonable documentation or other reasonable explanations supporting such charges.

Except as otherwise specified herein, the **CITY** shall pay the **CONTRACTOR** for said invoice within thirty (30) days after receipt.

The prices established in this **AGREEMENT** may be extended to other political subdivisions within the State of Montana solely at the **CONTRACTOR'S** discretion.

6. **INDEPENDENT CONTRACTOR STATUS:** The parties agree that **CONTRACTOR** is an independent contractor for purposes of this **AGREEMENT** and may not to be considered an employee of the **CITY** for any purpose. **CONTRACTOR** is not subject to the terms and provisions of the **CITY'S** personnel policies handbook and may not be considered a **CITY** employee for workers' compensation or any other purpose. **CONTRACTOR** is not authorized to represent the **CITY** or otherwise bind the **CITY** in any dealings between **CONTRACTOR** and any third parties.

7. **INDEMNITY:**

The **CONTRACTOR** SHALL:

- A. Indemnify and hold **CITY**, its officers, agents and employees harmless from any and all losses, damage and liability to the extent caused by any intentional or negligent act on the part of **CONTRACTOR** or its agents or employees.
- B. Not indemnify and hold the **CITY** harmless from claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses or reasonable attorneys' fees and costs to the extent caused by the wrongful or negligent acts, error or omission of the **CITY** occurring during the course of or as a result of the performance of the **AGREEMENT**.
- C. Where claims, lawsuits or liability, including reasonable attorneys' fees and costs arise from any wrongful or negligent act of both the **CITY** and the **CONTRACTOR**, the **CONTRACTOR** shall indemnify and hold the **CITY** harmless from only that portion of claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses including reasonable attorneys' fees and costs, to the extent caused by



the **CONTRACTOR'S** or any subcontractor's wrongful or negligent acts occurring as a result from the **CONTRACTOR'S** performance pursuant to this **AGREEMENT**.

The **CITY** SHALL:

- D. Indemnify and hold **CONTRACTOR**, its officers, agents and employees harmless from any and all losses, damage and liability to the extent caused by any intentional or negligent act on the part of **CITY** or its agents or employees.
- E. Not indemnify and hold the **CONTRACTOR** harmless from claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses or reasonable attorneys' fees and costs to the extent caused by the wrongful or negligent acts, error or omission of the **CONTRACTOR** occurring during the course of or as a result of the performance of the **AGREEMENT**.
- F. Where claims, lawsuits or liability, including reasonable attorneys' fees and costs arise from any wrongful or negligent act of both the **CONTRACTOR** and the **CITY**, the **CITY** shall indemnify and hold the **CONTRACTOR** harmless from only that portion of claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses including attorneys' fees and costs, to the extent caused by the **CITY'S** or any subcontractor's wrongful or negligent acts occurring as a result from the **CITY'S** performance pursuant to this **AGREEMENT**.

#### 8. **INSURANCE:**

- A. The **CONTRACTOR** shall maintain in good standing the insurance described in this Section. Before rendering any services under this **AGREEMENT**, the **CONTRACTOR** shall furnish the **CITY** with proof of insurance in accordance with this Section.

The **CONTRACTOR** is exempt from Workers' compensation and employer's liability coverage as required by Montana law, but shall provide the following insurance with the **CITY** listed as an additional insured:

- Aircraft and Commercial General Aviation liability -- \$750,000 per claim and \$1,000,000 per occurrence.
- Automobile liability -- \$1,000,000 per accident.

Each policy of insurance required by this Section shall provide for no less than 30 days' advance written notice to the **CITY** prior to cancellation.

- 9. **WARRANTY:** **CONTRACTOR** warrants that all services and work will be performed in a good workman-like manner. **CONTRACTOR** acknowledges that it will be liable for any breach of this warranty for the lesser period of one (1) year



from the time services are completed. Product warranties are as described in Exhibit "A".

10. **COMPLIANCE WITH LAWS:** **CONTRACTOR** agrees to comply with all federal, state, and local laws, ordinances, rules and regulations. **CONTRACTOR** agrees to purchase a **CITY** business license.

11. **NONDISCRIMINATION:**

A. **CONTRACTOR** shall, in performance of work under this **AGREEMENT**, fully comply with all applicable federal, state, or local laws, rules, regulations, and executive orders including but not limited to, the Montana Human Rights Act, the Equal Pay Act of 1963, the Civil Rights Act of 1964, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. **CONTRACTOR** is the employer for the purpose of providing healthcare benefits and paying any applicable penalties, fees and taxes under the Patient Protection and Affordable Care Act [P.L. 111-148, 124 Stat. 119]. Any subletting or subcontracting by **CONTRACTOR** subjects subcontractors to the same provisions. In accordance with 49-3-207, MCA, and Executive Order No. 04-2016. **CONTRACTOR** agrees that the hiring of persons to perform this Contract will be made on the basis of merit and qualifications and there will be no discrimination based on race, color, sex, pregnancy, childbirth or medical conditions related to pregnancy or childbirth, political or religious affiliation or ideas, culture, creed, social origin or condition, genetic information, sexual orientation, gender identity or expression, national origin, ancestry, age, disability, military service or veteran status, or marital status by the persons performing this **AGREEMENT**.

B. The **CONTRACTOR** shall state, in all solicitations or advertisements for employees to work on jobs, that all qualified applicants will receive equal consideration for employment without regard to race, color, religion, national origin, ancestry, age, sex or marital status, or mental or physical impairment/disability.

The **CONTRACTOR** and subcontractor shall abide by the requirements of 41 CFR 60-300.5(a) and 41 CFR 60-741.5(a), which prohibit discrimination against qualified protected veterans and/or qualified individuals on the basis of disability, and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities.

The **CONTRACTOR** and any subcontractor shall abide by the requirements of 41 CFR 60-1.4, which states employees or applicants may not be discharged or in any other manner discriminated against because they have

inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. However, employees who have access to the compensation information of other employees or applicants as a part of their essential job functions cannot disclose the pay of other employees or applicants to individuals who do not otherwise have access to compensation information, unless the disclosure is (a) in response to a formal complaint or charge, (b) in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or (c) consistent with the **CONTRACTOR'S** legal duty to furnish information.

- C. The **CONTRACTOR** shall comply with any and all reporting requirements that may apply to it that the **CITY** may establish by regulation.
  - D. The **CONTRACTOR** shall comply with all applicable federal, state, and city laws concerning the prohibition of discrimination.
  - E. The **CONTRACTOR** shall include the provisions of Subsections A through D of this Section in every subcontract or purchase order under this **AGREEMENT**, so as to be binding upon every such subcontractor or vendor of the **CONTRACTOR** under this **AGREEMENT**.
  - F. The **CONTRACTOR** agrees to post, in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.
12. **DEFAULT AND TERMINATION:** If either party fails to comply with any condition of this **AGREEMENT** at the time or in the manner provided for, the other party may, at its option, terminate this **AGREEMENT** and be released from all obligations if the default is not cured within ten (10) calendar days after written notice is provided to the defaulting party. Said notice shall set forth the items to be cured. Additionally, the non-defaulting party may bring suit for damages, specific performance, and any other remedy provided by law. These remedies are cumulative and not exclusive. Use of one remedy does not preclude use of the others. Notices shall be provided in writing and hand-delivered or mailed to the parties at the addresses set forth in the first paragraph of this **AGREEMENT**.
13. **LIAISON:** **CITY's** designated liaison for this **AGREEMENT** is Mark Solberg, and **CONTRACTOR's** designated liaison for this **AGREEMENT** is Dave King.
14. **GOVERNING LAW AND VENUE:** This **AGREEMENT** shall be construed and enforced in accordance with the laws of the State of Montana. Venue for any suit between the parties arising out of this **AGREEMENT** shall be the State of Montana Thirteenth Judicial District Court, Yellowstone County.



15. **SEVERABILITY:** Any provision or part of the **AGREEMENT** held to be void or unenforceable under any law or regulation shall be deemed stricken and all remaining provisions shall continue to be valid and binding upon the **CITY** and the **CONTRACTOR**, who agree that the **AGREEMENT** shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
16. **SUCCESSORS AND ASSIGNS:** Neither the **CITY** nor the **CONTRACTOR** shall assign, transfer or encumber any rights, duties or interests accruing from this **AGREEMENT** without the written consent of the other.

**IN WITNESS WHEREOF**, the parties hereto have executed this instrument the day and year first above written.

**CITY OF BILLINGS, MONTANA**

**STEEL CITY DRONES, LLC**

\_\_\_\_\_  
**WILLIAM A. COLE, MAYOR**

\_\_\_\_\_  
**DAVE KING, PRESIDENT & CEO**

**APPROVED AS TO FORM:**

**ATTEST:**

By \_\_\_\_\_  
**CITY ATTORNEY'S OFFICE**

\_\_\_\_\_  
**DENISE BOHLMAN, CITY CLERK**

EXHIBIT A: PRODUCT AND SERVICES SPECIFICATIONS

**Steel City Drones LLC**

282 Foxcroft Road  
 Pittsburgh, PA 15220  
 +1 4129801941  
 dave@steelcitydrones.com



**Estimate**

ADDRESS	SHIP TO	ESTIMATE	2343
City of Billings	City of Billings	DATE	11/10/2022

DESCRIPTION	QTY	RATE	AMOUNT
Steel City M300 package includes: Matrice 300 RTK kit includes 1 year basic shield crash protection. This kit includes the following: (1) aircraft body, (1) DJI Smart Controller and Lanyard, (2) TB60 batteries, 1 TB60 Battery charging station, (1) WB37 battery, (4) spare props, (2) landing gear legs, (1) vision calibration plate, (1) USB charger, (2) USB cables, screws-tools-spare parts.	6	13,199.00	79,194.00
Zenmuse H20T 4in1 camera with 1 year basic shield crash protection.	6	9,809.00	58,854.00
6 additional TB 60 Intelligent flight batteries for a total of 8 batteries for each aircraft	36	700.00	25,200.00
2nd Matrice 300 Smart controller	6	1,250.00	7,500.00
HPRC Matrice 300 case	6	985.50	5,913.00
Matrice 300 Dual Gimbal Mount	6	250.00	1,500.00
Universal Gas-radiation meter mount compatible with M300 series	6	1,250.00	7,500.00
DJI Enterprise Shield Basic Renew Protection plan for Matrice 300. When purchased the customer will get an activation code to use when there is less than 1 month left on their initial plan.	6	899.00	5,394.00
DJI Enterprise Shield Basic Renew Protection plan for the H20T Camera. When purchased the customer will get an activation code to use when there is less than 1 month left on their initial plan.	6	999.00	5,994.00
4 days of onsite setup and training. 6 training sessions on-site at each host (department) Billings, Bozeman, Great Falls, Helena, Missoula, Kalispell). In total there would be 24 days of onsite training for the 6 locations listed. This would consist of 4 days of training at each of the 6 locations. Each location will have up to 10 participants with one instructor. We are offering 3 days of onsite training at each location for no extra cost. The only charge would be for 1 day of training for each location at a cost of \$1500 per day which has been discounted 25% from our normal \$2000 per day rate. In total we are including \$39,000 of training at no cost. Cost listed includes Steel City Drones Travel Costs. To summarize Steel City Drones is covering for 3 of the 4 days at each location at no extra charge and discounting the 4th day of training 25%.	6	1,500.00	9,000.00
2nd instructor included for each of the 6 locations to decrease the student to instructor ration to 5 to 1. Each instructor will have 5 training participants. Cost listed is based on each day the 2nd instructor. This cost is discounted at 50% for a savings of \$24,000. Cost includes Steel City Drones travel costs	6	4,000.00	24,000.00
24X7 support for as long as you own the equipment.	6	0.00	0.00
Unlimited Access Matrice 300 online training library for continual training development. Includes over 9 hours of training videos. These videos can be used for	6	0.00	0.00

monthly group training exercises			
Policy-SOP development Assistance	6	0.00	0.00
Unlimited access to Steel City Drones Part 107 online course	6	0.00	0.00

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Steel City Drone's M300 startup package	SUBTOTAL	230,049.00
	TAX	0.00
	<b>TOTAL</b>	<b>\$230,049.00</b>

Accepted By

Accepted Date

#### TAB 4 - PRODUCT DATA

The Specs listed in this RFP bid clearly show that the DJI Matrice 300 is the best platform for the following reasons.

- The agency wants to use various payloads (Gas Detection Systems).
- The Matrice 300 has the ability to carry up to 7 pounds in Payload.
- This aircraft provides the maximum flight time out of any drone on the market. It does not have the ability for 45 minute flights but will give the end user a true 34 minute flight time. More on this exception below in the bid.
- When the Matrice 300 is combined with a spotlight it provides the best possible low light capability.
- The Matrice 300 has the best Camera platform (Zenmuse H20T) which allows the end user to read a license plate from 1500 feet away and gives the highest resolution thermal camera on the market.
- The Matrice 300 is very user friendly as the H20T camera has all the cameras built into 1 camera package. You don't have to change cameras all you need to do is switch cameras through the app by pressing a button.
- The Thermal camera has Isotherm technology which allows you assign specific color pallets to any temperature range you desire which is great for Fire applications and Search & Rescue.
- The Matrice 300 is water resistive so you can fly it in rain or snow.
- The Matrice 300 has the ability to use 2 remote controllers so that you can have 2 pilots that can Leap frog from one to the other for longer distances. You can also have one operator as the pilot and one operator as a dedicated camera operator for very efficient flights.
- This aircraft can do autonomous flights very easily and allows the end user to setup search and rescue grids for effective missions.
- This aircraft is very modular which can be fitted with many different types of accessories such as spotlights, loudspeakers, payload drop systems and tethered power solutions.
- We have a 45 minute video that goes over all the features and functionality of this aircraft with lots of sample footage. You can see the review video below.



DJI Matrice 300 | Extensive Test & Review

Link to the Review video can be found here [https://youtu.be/0vJNlqo\\_Spw](https://youtu.be/0vJNlqo_Spw)

## TAB 5 - Video Storage System

All recorded media (video and photos) are written onto a MicroSD card on the camera. The media is high resolution video and photos. To view the footage the end user will take the card out of the camera and use a MicroSD card to USB or MicroSD to SD card converter to view the footage. Any PC or Mac can view the footage.

We recommend Adobe Lightroom if you are going to take a lot of pictures. Lightroom will help catalog all the footage in a very organized platform. Lightroom can also allow the end user to make adjustments to multiple images at the same time.

The Smart controller has a HDMI connector on the back of it which will allow you to run real time camera data to a larger display monitor or external system. You can also use a second controller as a data source. For example you can have the pilot outside flying and then use the second controller for a camera operator who can be inside a command vehicle or Fire Truck. You can also use the second controller just a video source to take to monitors inside a command vehicle via the wireless transmission to and from the drone.

Lastly, it is possible to broadcast the drone feed back to centralized command center that is not near the flying area. There are 3<sup>rd</sup> party solutions that can allow the end user to upload the footage to a cloud server and then anyone with an internet connection and the URL can view the footage anywhere in the world. The Smart Controller allows the end user to install 3<sup>rd</sup> party apps for uploading content to a cloud server.

## TAB 6 – MAINTENANCE AND SUPPORT

- Maintenance for the equipment is minimal and is covered during the onsite training as well as in the Online Course.
- Steel City Drones offers 24/7 tech support 7 days a week. We answer the phone on weekends as well so we are always there to offer technical support over the phone as needed.
- The technical support offered with this bid is unlimited in regards to time as it does not expire. Our tech support is there as long as you own the equipment and is free of charge so there is no need for a maintenance or support contract.
- Ongoing maintenance can be performed by your local staff or we can provide it for you if you send the equipment out to us. We have sold more than 85 Matrice 300's to public safety clients since June 2019 and there has not been any maintenance issues with any clients.

## Tab 7 – TRAINING CURRICULUM AND OVERALL PLAN

Since there are no industry standards for drone training, it is highly recommended to compare the overall training curriculum and experience of the actual trainer that would be working with your staff.

### **Our drone training includes the following core fundamentals.**

- Setup all equipment and review the following during setup.
  - How to perform firmware updates using Assistant 2 and the Smart Controller.
- Activate the Shield plans
- Review all items they purchased
  - What they are and how to use them.
    - How to unfold and how to prevent over-tightening of the collars.
    - Explain how the landing gear can fall off in flight.
    - How to install the camera
    - How easy it is to lose the cap.
    - How to install the batteries
    - How to charge the batteries
    - How to install the smart controller battery and charge it.
    - Go over the basics of the remote controller
      - How to get a wireless cell connection to the controller
    - Review what the maintenance cradle is and how to use it. It should stay on top of the aircraft when being transported with the HPRC case.
    - If they have not purchased the HPRC case, why using that case is so important over the stock case
    - Show the 2 RTK puck antennas and how they need the DRTK2 base station or Ntrip
- Review the Pilot 2 app in the classroom
- Go over the following with the batteries
  - Look at Battery voltage instead of percentage.
  - Look at battery temperature in flight don't exceed 125F
  - Set low battery warning to 35% be on the ground by 20% or 125F which ever comes first.
  - Set discharge time to 2 days
  - Keep batteries at room temperature before you fly in cold weather.
  - Battery heater only are designed to keep batteries at room temperature in the air, not to bring them to room temperature.
  - Individual cells should never be more than 0.1 of a volt apart.
  - How to check batteries are bad
    - Hover test
    - Load test
- Go over the Matrice 300 maintenance checklist preparing to fly.
- Get aircraft up in the air
- Demonstrate the main features including
  - How to change cameras
  - How to use the zoom camera

- Review touch to focus and touch to auto exposure settings
- How to use Thermal camera and isotherms
- How to use smart track
- How to drop a pin
- How to use the range finder
- Show to properly land the Matrice 300
  - Landing is a one stick operation.
  - Using the right stick can tilt the aircraft backwards damaging the props and antenna systems.
- Let the students fly and field questions
- Show how to perform a basic mission flight
  - How to create search and rescue grid maps for maximum efficiency.
  - Perform several search and rescue auto flight missions.
  - How to perform mission flights with and without a 2<sup>nd</sup> controller and camera operator.
- Show how to engage ATTI mode and perform missions in ATTI mode.
- Review the RTK technology and it works using the DRTK2 base station. For this training we will bring our DRTK2 base station and let the agency see how it works for a possible future purchase.
- We will also bring the following optional accessories for the agency to try out
  - CZI GL60 spotlight.
  - CZI Loudspeaker
  - CZI LED lights
  - CZI infrared spotlight
  - CZI TH4 payload drop system
- We will also bring our portable 13 inch high bright monitor broadcast displays to show how larger monitors can drastically improve the flight efficiency of drone technology.
- Review DroneSense
  - How it works
  - Flight demo
  - Broadcast flights back to Fire station.



# DJI MATRICE 300 MAINTENANCE CHECKLIST

Steel City Drones Flight Academy

## STEP 1: TOP INSPECTION

- Inspect props - Leading edges
- Spin motors for bearing issues
- Check motor gap clearance
- Check aircraft arm connection bolts (X16)
- Check Top Frame Arm bolts (X12)
- Inspect boom locking sleeves for cracks
- Check Gimbal Damping Plate screws (x4)
- Inspect landing gear locking colors for cracks (x2)
- Clean vision system lens glass (front-side-back)
- Clean Strobe Light lens (top)
- Clean Upper Heat Dissipation Vents with Compressed Air or Canned Air
- Clean Rubber Port Connectors with Compressed Air or Canned Air
- Ensure the 2 Rubber Port Covers are pressed in and sealed
- Clean Battery Compartment Connectors

## STEP 2: BOTTOM INSPECTION

- Check bottom frame arm bolts (X12)
- Check prop adapter bolts (X8)
- Clean Lower Heat Dissipation Vents with Compressed or Canned Air
- Clean vision system lens glass (bottom)
- Check gimbal connectors are screwed in tight.
- Clean Strobe light lens (bottom)

## STEP 3: SMART CONTROLLER

- Inspect Rubber Caps that cover HDMI and USB ports (X2)
- Inspect the flip up antenna system for wear and cracks

## STEP 4: FIRMWARE

- Connect Aircraft to Assistant 2 for latest version
- Connect Remote to Assistant 2 for latest version
- Check all TB60 batteries to ensure they are on the latest version.
- Go to DJI.com and make sure all camera sensors are on the latest version.
- Make sure Precise Fly Database (App and Aircraft) are on the latest version
- Connect BS60 Battery Station to Smart Controller to make sure its on the latest version.

## STEP 5: FLIGHT TESTS

- During 15-15-15 safety check - Listen to motors for any abnormal sounds.
- Make sure aircraft hovers tight - Calibrate Compass as needed
- Recalibrate payload Center of Gravity Calibration as needed when new sensors are installed.
- Make sure TB60 cells are at 4.3 at 100% charge
- Make sure TB60 cells are less than 0.1V from cell to cell.

## PART 107 TRAINING

### Steel City Drones Customized Online Part 107 prep course

Our custom online course preapres Drone Pilots to take the FAA Part 107 remote pilot aeronautical test. This package includes unlimited access to our FAA accelerated online training platform. Over 2200 students have taken our Part 107 course and we have not had one student fail the test that completed our program.

We have Custom Ground school videos will also help certified operators prepare for advanced ground school in phase 3. On average it takes 10-16 hours of study time before students are ready to take the test.

Our online ground school has a simulated practice test that a student can take to gauge how ready they are. Our online Part 107 course is **free** and included with this bid.

The screenshot displays the 'FAA Part 107 Exam Prep' interface. On the left is a sidebar with a progress bar at 0% complete and a list of lessons: Introduction (0/1), How & What To Study (0/1), Documentation (0/1), Sectional Charts & Maps (0/2), Airspace (0/3), Airport Operations (0/2), Weather (0/2), Additional Topic Quizzes (0/3), OFFICIAL PRACTICE EXAM (0/1), and the selected 'FAA Part 107 Practice Exam' (QUIZ · 60 QUESTIONS). The main content area is titled 'FAA Part 107 Practice Exam' and shows 'Appendix 2' with a TAF forecast for KMEM: 'KMEM 121720Z 1218/1324 20012KT 5SM HZ BKN030 PROB40 2022 1SM TSRA OVC008CB FM2200 33015G20KT P6SM BKN015 OVC025 PROB40 2202 3SM SHRA FM0200 35012KT OVC008 PROB40 0205 2SM-RASN BECMG 0608 02008KT BKN012 BECMG 1310/1312 00000KT 3SM BR SKC TEMPO 1212/1214 1/2SM FG FM131600 VRB06KT P6SM SKC='. Below the TAF is the question: '(Refer to Figure 15) What is the valid period for the TAF for KMEM?' with four multiple-choice options: A) 1800z on the 12th to 2400z on the 13th, B) 1200z to 1800z, C) 1200z to 1800z, and D) 1200z on the 18th to 1300z on the 24th.

# AIRSPACE 101

CLASS	FLOOR	CEILING
<b>B</b>	CAN START AT SURFACE OTHERWISE ALTITUDE IS <b>MSL</b>	<b>ALWAYS MSL</b>
<b>C</b>	CAN START AT SURFACE OTHERWISE ALTITUDE IS <b>MSL</b>	<b>ALWAYS MSL</b>
<b>D</b>	<b>ALWAYS STARTS AT SURFACE</b>	<b>ALWAYS MSL</b>
<b>E</b>	<b>CAI</b> <b>OT</b> <b>IS AGL (700 or 1200 AGL)</b>	<b>ALWAYS MSL</b>

CLICK ON THE **LINK BELOW** TO SEE SAMPLE FOOTAGE OF OUR PART 107 COURSE

<https://youtu.be/qRceewErfjM> - Link to the Course

Go to Dashboard
TEST PREP DRONES PART 107

FAA Part 107 Exam Prep

0% complete

Search by lesson title

- Introduction: 0/1
- How & What To Study: 0/1
- Documentation: 0/1
- Airspace: 0/2
- Sectional Charts & Maps: 0/1
- Airport Operations: 0/1
- Weather: 0/1
- REVIEW: 0/1
- Course & Test Review  
VIDEO - 42 MIN - PREREQUISITE
- OFFICIAL PRACTICE EXAM: 0/2
- Bonus Material: 0/2
- Share Your Thoughts: 0/2

## SAMPLE COURSE VIDEO

4201- Class E starts again all the way up to but not including 18,000 MSL

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**CLASS C**

1400 MSL - Floor of Class C  
1399 MSL - Ceiling of Class E

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**CLASS E**

700 AGL - Floor of Class E  
699 AGL - Ceiling of Class G

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**CLASS G**

413 feet AGL

Ground level

CLICK ON THE **LINK BELOW** TO SEE THE COURSE

<https://youtu.be/oX6DRqxazLk> - Link to the course

## TRAINING OVERVIEW OF THE 2 DAY TRAINING

This class consists of a comprehensive introduction to all the equipment that the organization has purchased including the drone and support equipment. We take all equipment out of their cases and go over every item one by one. We show how to setup all the equipment and the proper handling and care. Among the support equipment we cover in this class includes the aircraft, landing gear, all cameras and sensors, remote controller, monitors, device apps including Go 4 and pilot, batteries, and miscellaneous accessories.



### **This class includes the following elements**

- Brief description of each component
  - Aircraft
  - Camera sensors
  - Remote controllers
  - Monitors
  - Batteries
  - Flight Apps
- How to unpack and remove all items from the case properly.
- How to assembly the aircraft platform
- How to setup all support equipment
- How to turn on the aircraft and all accessories.

## INTRO TO DRONES – HOW THEY WORK

This is a class that includes complete and comprehensive familiarization with all drone equipment your company has purchased as well as an introduction to flying portion. This class assumes each student knows nothing about drones and starts from the ground up to create a strong foundation of learning. Instruction is split with half classroom theory, and half flying instruction time. This class starts out in the classroom and reviews all aspects and components of a drone. It contains a comprehensive equipment familiarization portion that discusses setup and care of all equipment. We discuss all features and functions of a drone and the limitations of the technology.

We review why “Drones are easy to fly, hard to control” and discuss why its extremely important to understand the limitations of drone technology and why our course puts a very high emphasis on learning to fly manually with no automation. We teach each student about the limitations of automation and how to apply that for flight operations.

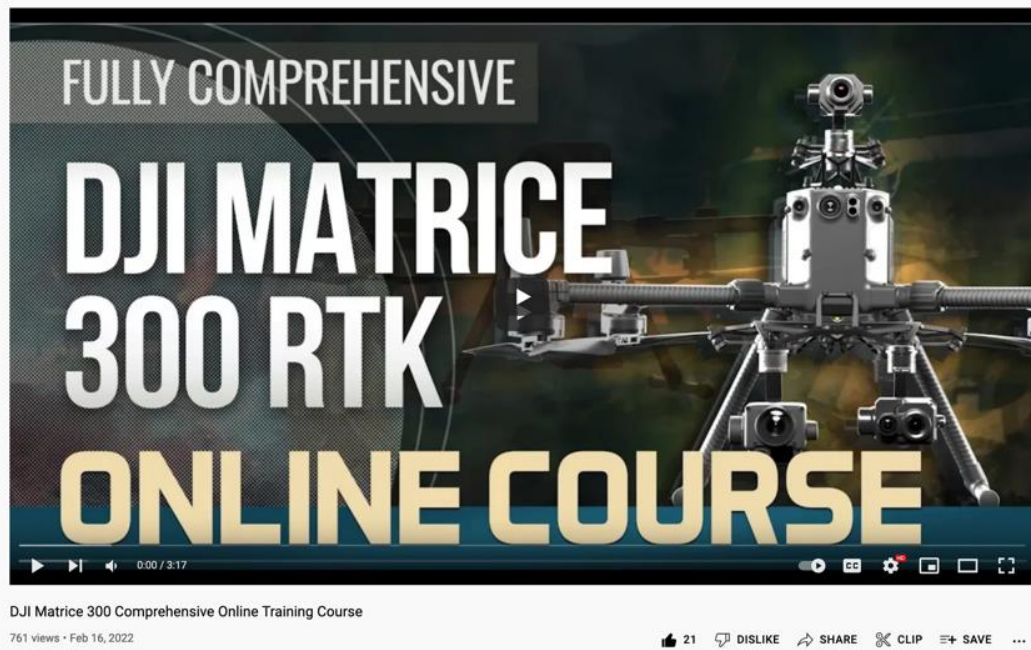
For the flying portion of the class each operator will cover the 4 fundamental control maneuvers and start flying right away. Students will then learn how to apply multiple flight controls at once to start performing practicing exercises. Other features of the class include:

- ✓ All features and functions of a drone – How does a drone work?
- ✓ What are the technology limitations?
- ✓ What does it take to become a very good remote pilot?
- ✓ Proper care and maintenance needed for aircraft batteries
- ✓ How to use the remote controller and all DJI flying apps.
- ✓ How to practice safely and effectively in between training sessions



## THE ULTIMATE MATRICE 300 TRAINING RESOURCE

Steel City Drones is very proud to have implemented a Critical training program to supplement the onsite training services for the Matrice 300. Our comprehensive online course is like nothing you will find anywhere.



Link to the Matrice 300 online course promo video <https://youtu.be/UUijpZEx29A>

### Highlights of our Matrice 300 online course

- The only comprehensive online course in the world.
- Over 9 hours of video content.
- The course outline shows what material is in which video with a timeline of where you can find specific parts in every video.
- You can find any part of 9 hours of video very quickly
- Test review to complete the course
- Certificate of completion after you pass the test
- Course content includes
  - How to update firmware.
  - Recommended Maintenance program
  - How to use the H20T, P1, L1, and H20N camera sensors.
  - Indepth review of the Pilot flight app
  - How to perform autonomous flights
  - How to use DJI Terra to create 2D and 3D maps.
  - Troubleshooting
  - Accessories
  - Aircraft battery maintenance
  - Flying
  - Quiz review



M300 Online Course Sneak Peak: Terrain Following

Link to the sneak preview of the section on Terrain Following <https://youtu.be/xc2MDv-ZEOM>

**EXAMPLE OF A HEALTHY BATTERY**

4.01V 3.99V 4.00V 4.00V 3.99V 3.99V 4.00V 4.00V 3.99V 4.00V 4.00V 3.99V

**VOLTAGE DIFFERENCE BETWEEN CELL IS VERY LOW**

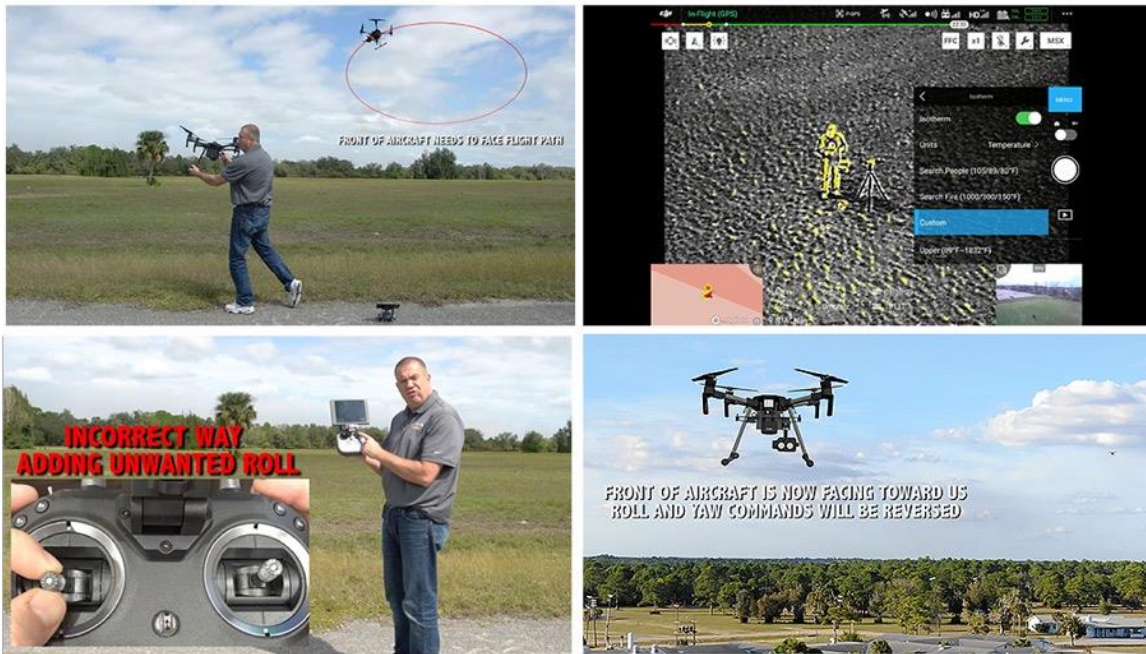
**EXAMPLES OF GOOD AND BAD VOLTAGE DIFFERENCES**

Cell 1 - 4.11	Cell 1 - 4.11	Cell 1 - 4.21
Cell 2 - 4.01	Cell 2 - 4.08	Cell 2 - 4.03
0.10 difference	0.03 difference	0.18 difference
<b>GOOD</b>	<b>GOOD</b>	<b>BAD</b>

**M300 COURSE - TB60 BATTERIES PART 1**

[https://youtu.be/lzG8\\_zszZLw](https://youtu.be/lzG8_zszZLw) - Click on the Link to see this M300 video.

The continual training program is a blend of equipment familiarization, 15 flying exercises, active scenarios and ground school instruction. Our M300 course has 35 videos and 8 hours of content.



SAMPLE M300 TRAINING VIDEO

ONLINE FLIGHT TRAINING VIDEO LIBRARY SAMPLE VIDEOS



[https://youtu.be/ fwkkRpk-zQ](https://youtu.be/fwkkRpk-zQ) Click on the link to the video above

## Flying Exercises - Introduction to Circles



## TAB 8 - WARRANTIES

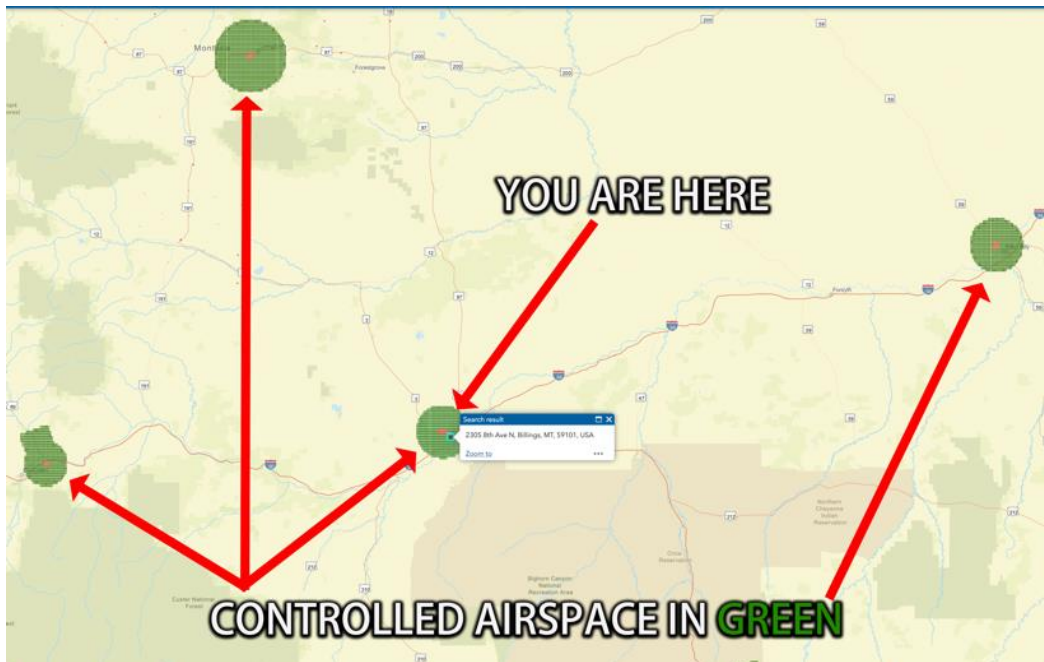
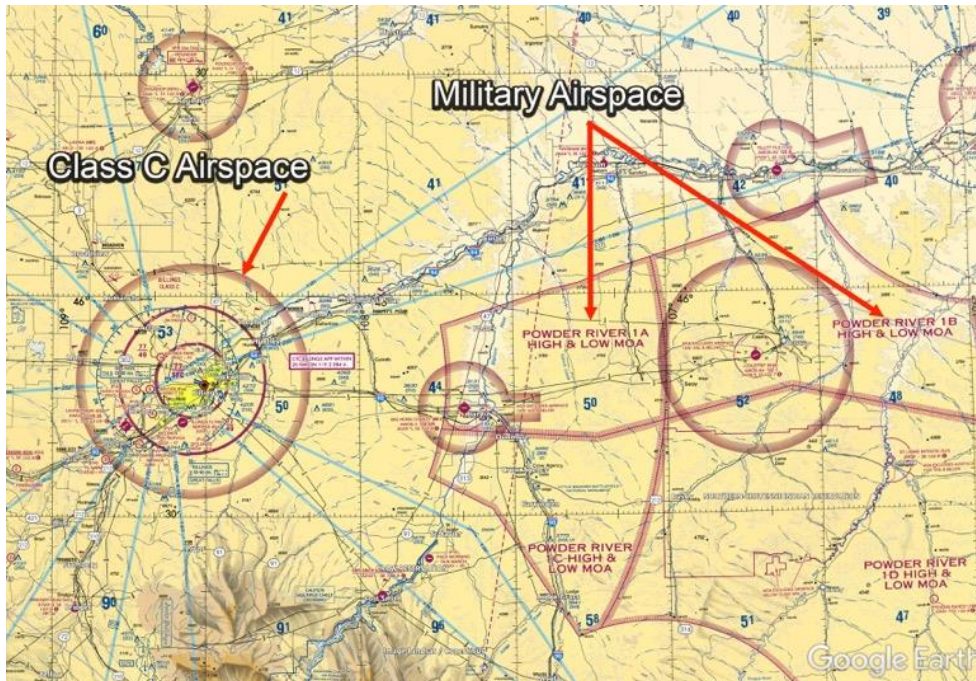


The purchase of your Matrice 300 comes with DJI Enterprise Basic Shield for no additional cost. This plan includes:

- 1 year crash protection plan
- This plan includes up to 2 replacements in the 12 month time frame.
- There is a deductible of \$500 for the aircraft and \$500 for the camera if you need to use the plan.
- Covers water damage that the basic warranty does not.
- Does not cover lost-stolen-unrecoverable equipment. You must be able to ship the equipment back to DJI for the shield plan to cover the cost.
- This plan covers all crashes including user error, collisions, and drop damages and will replace the equipment with no questions asked.
- This plan is renewable after the one year plan is up. The current renewable price is \$1600 for both the aircraft and the camera to extend coverage into a 2<sup>nd</sup> year.
- AS of right now a 3<sup>rd</sup> year plan is not available.
- If you have a manufacturer defect you do not need to use your shield plan the standard 1 year warranty will cover the repair.
- DJI covers shipping costs to send equipment back to DJI.
- External 3<sup>rd</sup> party repairs or modifications will void the manufacturer warranty.
- There is a Shield plus plan that is available for an additional cost of \$1000 but we do not recommend it. Essentially you would be prepaying for your deductibles ahead of time and if you don't need to use it you can't get that additional cost back. The basic shield plan that does not cost anything additional is more than sufficient.

Tab 9 - OTHER

We evaluated the Airspace around the City of Billings within a 30 mile radius. We do feel that a COA application is appropriate for your agency. We recommend using the COA only for flights where your agency can't comply with Part 107.



## FAA CERTIFICATE OF AUTHORIZATION PROCESS

### Applying for a FAA Certificate of Authorization

It is good to apply for a Certificate of Authorization with the FAA and apply for the ability to fly over people in extreme emergency situations. Since the COA has limitations you only want to use it as needed. Limitations include

- Monthly reports – For every flight flown under the COA it requires all flight data to be reported.
- Evidence issues – There has been issues getting evidence submitted captured with a drone if the drone operator is not Part 107 certified.

Built in to our cost and overall program development includes Steel City Drones completing the FAA Application for the Certificate of Authorization at no additional cost.

## COA Application Processing System



[Start a new Public COA](#)

[Continue a Saved or Released Public COA](#)

[View Submitted Public COAs](#)

[View Approved Public COAs](#)

[Search Existing Public COAs](#)

[Renew a Public COA](#)

[Create Report for Public COA](#)

[Continue Saved Report for Public COA](#)

[View a Submitted Report for Public COA](#)

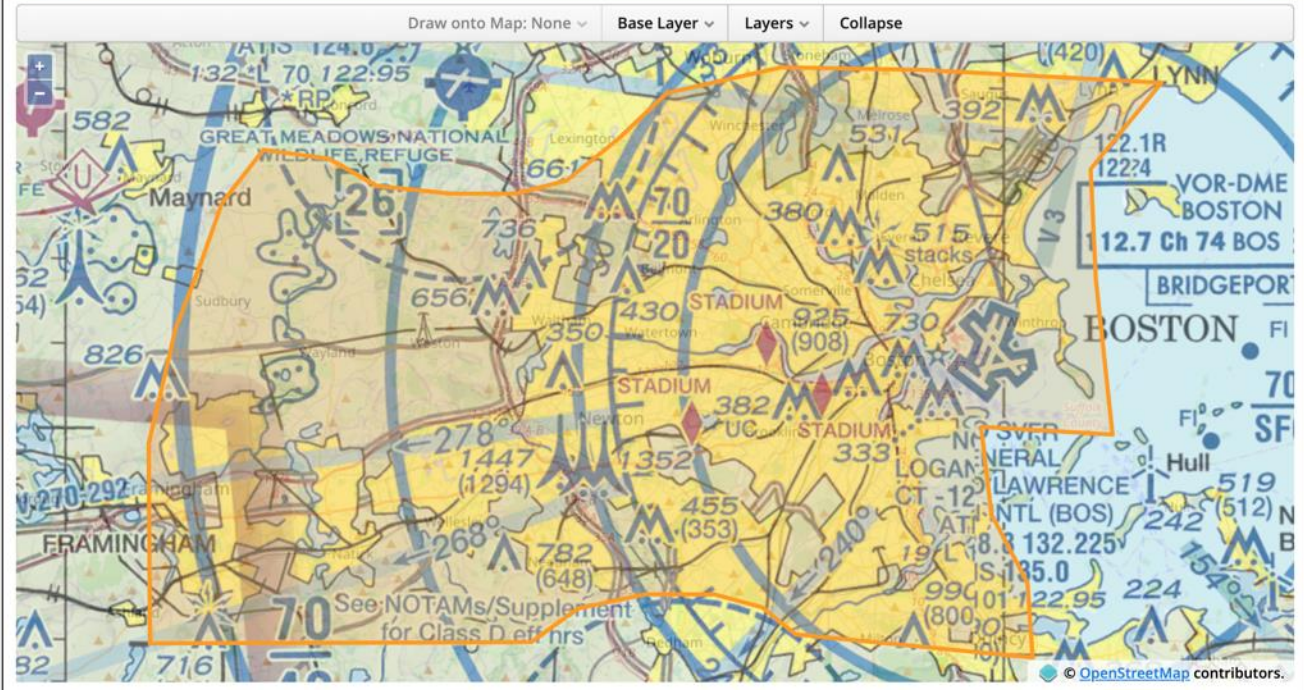
[View Approved Public COA from COA Online](#)

To get the process started The City of Billings will need to have the DA's office send a declaration letter to the FAA. WE can give you a template for what needs to be in the letter.

# COA Application Processing System

Home Public COA ▾ COA Reports ▾ Log Out

## Flight Operations Area/Plan



Once we get access to the FAA Portal the only thing we will need from the agency is to define the area that the COA will cover. The picture below shows what you receive when the FAA approves it.

The certificate is effective from April 01, 2020 to March 31, 2022, inclusive, and is subject to cancellation at any time upon notice by the Administrator or his/her authorized representative.

BY DIRECTION OF THE ADMINISTRATOR

**MARTIN A SKINNER**  
Digitally signed by MARTIN A SKINNER  
Date: 2020.03.31 14:27:17 -05'00'

FAA Central Area Service Center, AJV-C23  
(Region)

Marty Skinner  
(Signature)

Tactical, Operations Manager, CSA, AJV-C23  
(Title)

## OUR PROGRAM DEVELOPMENT PLAN

Steel City Drones recommends the following plan for The City of Billings to start using Drones.

### 1. Develop an internal drone program

- a. The first step in the process is to start working on your organizations internal drone program. This includes company policy, internal workflow processes and procedures, Standard Operating Procedures (SOP), or SOG.
- b. Many organizations Google “drone programs” and try to adapt other companies program. This never works because every organization runs differently and has different requirements.
- c. Many companies have no experience with drones so they have no idea what should be inside or included. We can help your organization develop the entire program as we have a wide variety of experience in this area. We develop a custom program around your company and you have the final say and decisions that go into it.
- d. Our SOP’s contain all internal workflow policies and procedures such as
  - i. Commitment to safety policies
  - ii. Approved drone usage.
  - iii. Procedures for requesting flights
  - iv. Night flying operations
  - v. Equipment check out and inspection policies
  - vi. Future training requirements
  - vii. Defining the entire UAS team and their roles
  - viii. Audits and assessments
  - ix. All support documentation such as Remote Pilot manuals, Crew Resource management, and Maintenance programs
- e. We start this process with a conference call with all organization stakeholders to acquire the necessary information to develop the first rough draft. From there it normally takes 1 to 2 revisions and the drone program is ready to go.
- f. **Helping The City of Billings create a Drone Program is free and at no additional charge. It’s included with the bid.**

**2. Purchase the equipment** – We will setup all equipment before delivering it.

**3. Apply for the Certificate of Authorization** – If needed, see notes above.

### 4. Initiate the Program and start the Training

- a. Finalize the drone program and all program documents.
- b. Perform 4 days of onsite training.
- c. Get the staff Part 107 certified and start training the staff.

### 5. Continued training is as important as the initial training

- a. We highly recommend monthly group training sessions as the initial training is not enough. Each remote pilot needs continual practice while they are developing.
- b. We developed monthly video training exercises that our clients will be able to access that will allow them to continue to train in an organized, and structured process.

## STEEL CITY DRONES PURCHASE EQUIPMENT MATRICE 300 SETUP CHECKLIST

- ✓ All protective vision sensor camera covers on the aircraft have been removed.
- ✓ Smart Controller has been active and firmware has been updated
- ✓ Smart Controller screen has been inspected and is free of scratches and cosmetic damages
- ✓ DJI Precise Fly database has been updated
- ✓ Aircraft has been activated and firmware has been updated
- ✓ BS60 Battery charging station has been activated and updated.
- ✓ The Airframe has been inspected for damage.
- ✓ The 4 Aircraft motors have been inspected for bearing issues.
- ✓ H20T camera has been tested and firmware updated.
- ✓ The props have been inspected for damage.
- ✓ Multiple flight mode has been activated to (Tripod-Sport-PH)
- ✓ Maximum altitude set to 400 feet
- ✓ Come up Altitude has been changed to 120 feet
- ✓ Verified Loss of Signal setting is set to Come Home
- ✓ Smart Return battery menu setting is turned on
- ✓ Low battery warning has been changed from 25 to 30%
- ✓ Aircraft has been flight tested and passes all tests.
- ✓ TB60 Battery Cells are 4.3 Volts at 100% charge
- ✓ Flight Recording has been made on Micro SD card and plays fine.
- ✓ Aircraft hovers as expected
- ✓ Long distance flight test of 1500 feet has been completed
- ✓ DJI Enterprise shield plan has been activated

\*All TB60 batteries need updated. Follow the instruction in the online Matrice 300 course for instructions.

### **The following equipment has been verified to be inside the M300 case**

- ✓ Matrice 300 aircraft
- ✓ 2 landing gear
- ✓ USB wall adapter
- ✓ One full set of spare props
- ✓ Camera: ZENMUSE H20T
- ✓ (2) M300 smart Controllers and both protective covers on back are installed.
- ✓ \_\_\_\_\_ WB37 batteries                      \_\_\_\_\_ TB60 batteries
- ✓ Vision Calibration plate
- ✓ Unopened bag of miscellaneous accessories including USB A to USB C adapter cable. USB A to USB cable, Spare parts and tools.
- ✓ Matrice 300 RTK user manual
- ✓ Unopened bag with Smart controller 3 point lanyard strap.
- ✓ Steel City Flight Checklist

### **FIRMWARE HAS BEEN UPDATED TO VERSIONS**

Aircraft: 02.02.0301

Smart Controller: 02.02.0102

Camera: 2.02.02.01.00

Batteries: 01.02.05.30

## CONCERNS ABOUT GAS DETECTION SPECS IN BID DOCUMENT

We can custom print you a mounting bracket but I just don't think it would work and I want to be as transparent and honest as I can be.

- With the prop wash from the drone its very hard to put any monitor on the bottom of the drone. The prop wash is very strong on any drone especially the M300 and the prop wash will push gases away from everything below the drone. It's ideal to mount gas monitors on top of the aircraft to get much better readings. This would prevent you from using the camera on the bottom.
- Even if you mounted the gas monitor on the bottom, for the camera to pick anything up it would have to be mounted at least 3 feet in front of the camera. This would not be practical to do on a drone and cause a lot of issues.
- Even under best conditions, any digital readout would be very hard to read during the daytime and picked up by the camera.
- Monitoring gases with a drone is not an efficient process and with the Sniffer 4D and Flir solutions that are out there. You can get some monitoring but its not going to yield extremely efficient results.

We have sold several solutions to fire departments over the years. The most popular application is the Sniffer 4D which you can see here <https://youtu.be/5bhGJg8W5V0>

It's mounted on top and its used in a way that you start down low to the ground and go straight up. That's the best way to monitor gases. It's also very flexible in that you can customize the module for just the gases you need to monitor. The other way to go is with the Flir U10 but its very expensive.

I would not try to use anything less than the Sniffer4D and I don't want to spec or recommend anything that I know will not work effectively for you.

**PRICES FOR THE SNIFFER 4D ARE INCLUDED AS AN ADDITIONAL ESTIMATE**

## ADDITIONAL RECOMMENDATIONS

We highly recommend the HPRC Matrice 300 case with your purchase. This case has the following advantages.

- Allows you to have all accessories in 1 case including 2 Smart Controllers, the H20T camera and 3 pairs of TB60 batteries.
- This case allows you to keep the landing gear on at all times. The factory case requires you to install the landing gear and remove it on site when you want to use it. Not only does this help with reducing setup and tear down time but also from a safety standpoint. We have seen clients not attach the landing gear properly and it has fallen off in the middle of a flight. Since the props are on the bottom of the aircraft it can't be hand caught if this happens. You have to perform a controlled crash into something soft like a tree or a bush to minimize damage if the landing gear falls off. With the landing gear installed properly its not an issue with the HPRC case as it allows you to keep the landing gear installed at all times.
- This case is narrow to fit through a standard door with no issues.
- The stock case does not allow you to put additional batteries or a Smart Controller inside it.
- The stock case's air check valve has failed on several occasions.



Steel City Drones GPC-HPRC M300 case comparison

See our video on this case here <https://youtu.be/xXCFNiheKLE>



Sniffer 4D Multi-Gas Detection System for Matrice 200-300  
1,444 views · Jul 7, 2021

See our video on this case here <https://youtu.be/5bhGJg8W5V0>

Here's some additional accessories that you may want to look at. We created Review videos for gear shown.



Link to the video here [https://youtu.be/X\\_TyiaWSsfw](https://youtu.be/X_TyiaWSsfw)



Link to the video here [https://youtu.be/FTIL1B\\_WnaA](https://youtu.be/FTIL1B_WnaA)



Link to the video here <https://youtu.be/TPISm8X-sYc>



CZI-Cytop TH4 MATRICE 300 Payload drop system  
3,642 views · Jan 7, 2022

72 DISLIKE SHARE CLIP SAVE ...

Link to the video here <https://youtu.be/5aIkWgsvOk>



Portable Ultra Bright Drone Monitors for the Outdoors  
694 views · Jun 10, 2022

26 DISLIKE SHARE CLIP SAVE ...

Link to the video here <https://youtu.be/ffc1i24SGus>



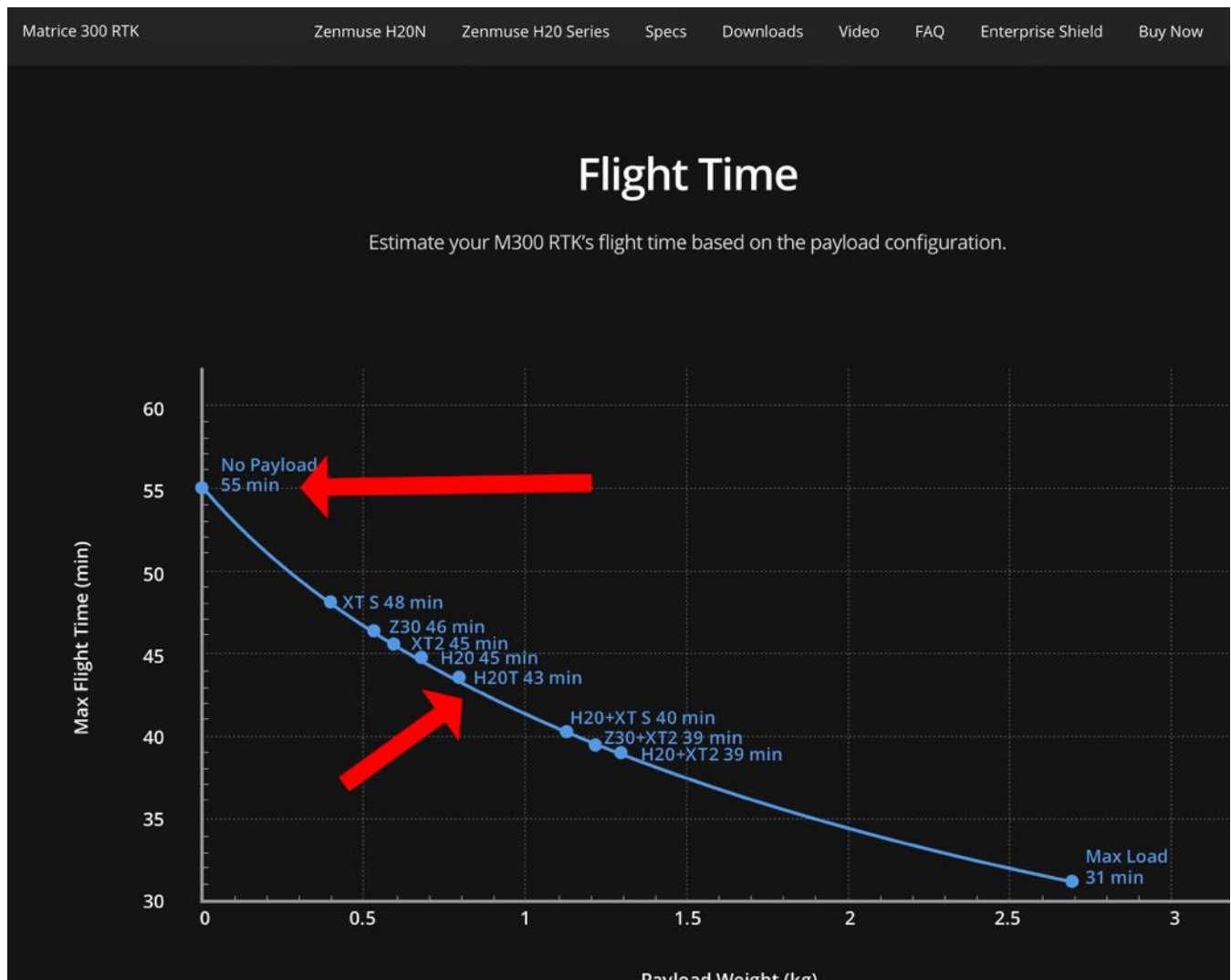
Portable Drone UAS Broadcast Command Station  
3,703 views · Jun 24, 2021

117 DISLIKE SHARE CLIP SAVE ...

Link to the video here [https://youtu.be/Ya\\_qFAUjBUk](https://youtu.be/Ya_qFAUjBUk)

## ABOUT THE FLIGHT TIME SPECS

DJI advertises 55 minutes with no payload and basically running it till it falls out of the sky. Battery temperature is a huge component of the health of the batteries in which you don't want to exceed 120 degrees. We never recommend running past 20% or anything higher than 120 degrees as doing so compromises the battery significantly and at \$700 each we don't want that. Realistic flight time is 32 to 34 minutes. Here's a video we did on this subject <https://youtu.be/-mGVSqg6OFg> We cover battery maintenance in our Matrice 300 online course that covers this material for more than 45 minutes.



Here is a screenshot from DJI's website on the Matrice 300 flight time. It shows up to 43 minutes with the H20T camera but again they are taking the batteries down till they fall out of the sky. DJI has always been known to inflate flight times on all aircraft by as much as 15-20%.

# CERTIFICATE OF INSURANCE

This certificate is given as a matter of information only and confers no rights upon the certificate addressee.

Date: July 29, 2022

This is to certify to:  
To Whom It May Concern

That the following policy has been issued to:  
DESIGNED AV SOLUTIONS DBA STEEL CITY DRONES  
282 FOXCROFT ROAD  
PITTSBURGH, PA 15220

Policy No. 9003981 issued by one or more member companies of Global Aerospace Pool through Global Aerospace, Inc.

Policy Period: from July 21, 2022 to July 21, 2023 Policy Territory: Worldwide

## AIRCRAFT AND COMMERCIAL GENERAL AVIATION LIABILITY Single Limit Bodily Injury and Property Damage (All expressed limits are "Each Occurrence" unless otherwise indicated)

<u>Registration Number</u>	<u>Year, Make &amp; Model</u>	<u>Liability Limit</u>	<u>Third Party War Liability</u>
	ANY UNMANNED AIRCRAFT SYSTEM THAT DOES NOT EXCEED 55LBS IN WEIGHT	\$1,000,000	\$1,000,000 Aggregate
1581F4QCB21AL00E032KDJI	INNOVATIONS MAVIC 3	\$1,000,000	\$1,000,000 Aggregate
1581F5BKD224G00B3JX7DJI	INNOVATIONS MATRICE 30T	\$1,000,000	\$1,000,000 Aggregate
1ZNDH3L0010686	DJI INNOVATIONS MATRICE 300 RTK	\$1,000,000	\$1,000,000 Aggregate

## AIRCRAFT PHYSICAL DAMAGE

<u>Registration Number</u>	<u>Year, Make &amp; Model</u>	<u>Risk Basis</u>	<u>Hull War</u>
	ANY UNMANNED AIRCRAFT SYSTEM THAT DOES NOT EXCEED 55LBS IN WEIGHT	Not Covered	Excluded
1581F4QCB21AL00E032KDJI	INNOVATIONS MAVIC 3	Not Covered	Excluded
1581F5BKD224G00B3JX7DJI	INNOVATIONS MATRICE 30T	Not Covered	Excluded
1ZNDH3L0010686	DJI INNOVATIONS MATRICE 300 RTK	Not Covered	Excluded

Policy includes Commercial General Aviation Liability coverages, with limits as shown in the policy.

Solely as respects an occurrence arising out of the ownership, maintenance or use of an unmanned aircraft insured under this policy and solely to the extent required in an agreement with the Named Insured, the following provisions shall apply:

The WHO IS AN INSURED section of the policy is amended to include the certificate addressee as an insured, but only as respects the Named Insured's use of the aircraft and only with respect to the certificate addressee's liability because of acts or omissions of the Named Insured. However, no such person or organization is an Insured if he, she, or it, or any of his, her, or its agents or employees is engaged in the manufacture, maintenance, repair, or sale of aircraft, aircraft engines, components or accessories, or in the operation of any airport, hangar, flying school, flight service, or aircraft or piloting service, as respects any occurrence arising out of such activity.

The insurance, as to the interest of the certificate addressee, shall be primary without right of contribution by any other valid and collectible insurance available to the certificate addressee.

We waive any right of recovery we may have against the certificate addressee because of payments it makes for physical damage to aircraft described in this certificate, but only to the same extent that the Named Insured has waived its right for recovery for such physical damage against the certificate addressee.

If the certificate addressee information shown on this certificate includes a valid mailing address, we agree to give 30 days (10 if cancelled for non-payment of premium) notice to the certificate addressee in the event the policy is cancelled or materially changed by us.

The certificate addressee has either (a) leased the aircraft described in this certificate to the Named Insured, or (b) hired the Named Insured to manage the aircraft described in this certificate.

As respects liability coverage for bodily injury and property damage arising out of the ownership, maintenance, or use of aircraft described in this certificate, the WHO IS AN INSURED section of the policy is amended to include the certificate addressee as an insured. However, the certificate addressee is not an Insured as respects his, her, or its liability for the design, manufacture, sale, or modification of the aircraft.

Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies. This certificate does not amend, extend or otherwise alter the coverages afforded by the policies described herein. Limits may have been reduced by paid claims.

GLOBAL AEROSPACE, INC.  
BY:



# CERTIFICATE OF INSURANCE

This certificate is given as a matter of information only and confers no rights upon the certificate addressee.

Date: December 06, 2022

This is to certify to:  
City Of Billings  
PO BOX 1178  
Billings, MT 59103

That the following policy has been issued to:  
Steel City Drones LLC  
282 Foxcroft Road  
Pittsburgh, PA 15220

Policy No. 9035852 issued by one or more member companies of Global Aerospace Pool through Global Aerospace, Inc.

Policy Period: from November 17, 2022 to November 17, 2023 Policy Territory: Worldwide

## AIRCRAFT AND COMMERCIAL GENERAL AVIATION LIABILITY Single Limit Bodily Injury and Property Damage (All expressed limits are "Each Occurrence" unless otherwise indicated)

<u>Registration Number</u>	<u>Year, Make &amp; Model</u>	<u>Liability Limit</u>	<u>Third Party War Liability</u>
	ANY UNMANNED AIRCRAFT SYSTEM THAT DOES NOT EXCEED 55LBS IN WEIGHT	\$1,000,000	\$1,000,000 Aggregate
1581F5BKD224G00B3JX72022	DJI INNOVATIONS MATRICE 30T	\$1,000,000	\$1,000,000 Aggregate
1ZNDH3L0010686	2020 DJI INNOVATIONS MATRICE 300 RTK	\$1,000,000	\$1,000,000 Aggregate

## AIRCRAFT PHYSICAL DAMAGE

<u>Registration Number</u>	<u>Year, Make &amp; Model</u>	<u>Insured Value</u>	<u>Risk Basis</u>	<u>In Motion Deductible</u>	<u>Not in Motion Deductible</u>	<u>Hull War</u>
	ANY UNMANNED AIRCRAFT SYSTEM THAT DOES NOT EXCEED 55LBS IN WEIGHT	Not Covered	None	Not Applicable	Not Applicable	Excluded
1581F5BKD224G00B3JX72022	DJI INNOVATIONS MATRICE 30T	\$100	All Risk	5.00%	5.00%	Included
1ZNDH3L0010686	2020 DJI INNOVATIONS MATRICE 300 RTK	\$100	All Risk	5.00%	5.00%	Included

Policy includes Commercial General Aviation Liability coverages, with limits as shown in the policy.

Solely as respects an occurrence arising out of the ownership, maintenance or use of an unmanned aircraft insured under this policy and solely to the extent required in an agreement with the Named Insured, the following provisions shall apply:

The WHO IS AN INSURED section of the policy is amended to include the certificate addressee as an insured, but only as respects the Named Insured's use of the aircraft and only with respect to the certificate addressee's liability because of acts or omissions of the Named Insured. However, no such person or organization is an Insured if he, she, or it, or any of his, her, or its agents or employees is engaged in the manufacture, maintenance, repair, or sale of aircraft, aircraft engines, components or accessories, or in the operation of any airport, hangar, flying school, flight service, or aircraft or piloting service, as respects any occurrence arising out of such activity.

The insurance, as to the interest of the certificate addressee, shall be primary without right of contribution by any other valid and collectible insurance available to the certificate addressee.

We waive any right of recovery we may have against the certificate addressee because of payments it makes for physical damage to aircraft described in this certificate, but only to the same extent that the Named Insured has waived its right for recovery for such physical damage against the certificate addressee.

If the certificate addressee information shown on this certificate includes a valid mailing address, we agree to give 30 days (10 if cancelled for non-payment of premium) notice to the certificate addressee in the event the policy is cancelled or materially changed by us.

The certificate addressee has either (a) leased the aircraft described in this certificate to the Named Insured, or (b) hired the Named Insured to manage the aircraft described in this certificate.

As respects liability coverage for bodily injury and property damage arising out of the ownership, maintenance, or use of aircraft described in this certificate, the WHO IS AN INSURED section of the policy is amended to include the certificate addressee as an insured. However, the certificate addressee is not an Insured as respects his, her, or its liability for the design, manufacture, sale, or modification of the aircraft.

The Company waives any right to recovery it may have against the certificate addressee because of payments it makes for physical damage to aircraft described in this certificate, but only to the same extent that the Named Insured has waived its right of recovery for such physical damage against the certificate addressee.

Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies. This certificate does not amend, extend or otherwise alter the coverages afforded by the policies described herein. Limits may have been reduced by paid claims.

GLOBAL AEROSPACE, INC.

BY:



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# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

12/06/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b>  <b>State Farm</b> TAD PATERRA INSURANCE AGENCY INC 984 GREENTREE RD PITTSBURGH PA 15220	CONTACT NAME: BERNI PHONE (A/C, No, Ext): 412-922-2622 E-MAIL ADDRESS:	FAX (A/C, No):
	<b>INSURER(S) AFFORDING COVERAGE</b>	
	<b>INSURER A:</b> State Farm Mutual Automobile Insurance Company	25178
<b>INSURED</b> STEEL CITY DRONES 282 FOXCROFT RD PITTSBURGH PA 15220	<b>INSURER B:</b>	
	<b>INSURER C:</b>	
	<b>INSURER D:</b>	
	<b>INSURER E:</b>	
	<b>INSURER F:</b>	

**COVERAGES****CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD INSD	SUB WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
X	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY			551 6304-C06-38	09/06/2022	03/06/2023	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ 1,000,000 BODILY INJURY (Per accident) \$ 1,000,000 PROPERTY DAMAGE (Per accident) \$ 1,000,000 \$
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y/N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER \$ E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

**CERTIFICATE HOLDER****CANCELLATION**

CITY OF BILLINGS PO BOX 1178 BILLINGS MT 59103	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE Completed by an authorized State Farm representative. If signature is required, please contact a State Farm agent.
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