



LTC Jeremy Latchaw's 10 STEPS How to Start a Drone Program



Lieutenant Colonel Jeremy Latchaw is the President of Macatawa Unmanned Systems a leading unmanned systems company in the United States. On active duty, Jeremy was the short-range air defense officer for 1st Brigade, 1st Infantry Division and was a Bradley Stinger Fighting Vehicle executive officer. After active duty service, LTC Latchaw worked for Booz Allen Hamilton creating Counter Insurgency and Counter Improvised Explosive Device curriculum.

In his reserve status, LTC Latchaw is an instructor for the U.S. Army's Command and General Staff College where he teaches operational level planning. Topics taught include: Operational Level Art, Military Art and Design, Military Decision Making Process.

In 2018 Small Unmanned Aircraft Systems (sUAS) / Drones saved the lives of residents in [Hawaii](#) during the volcano eruption by leading them all out of harm's way. The leading manufacturer of drones in the world, DJI, put out a report that there are at least 59 confirmed lives saved by this new technology since 2013. With the case studies for saving lives continuing to grow, one panelist at the recent AUVSI conference in Denver, CO stated: "it is almost criminal not to get these aircraft into the hands of all first responders."

If you are looking for how you develop one of the life-saving drone programs in your department, **start with backward planning.**

STEP ONE: [WATCH THIS VIDEO](#)

STEP TWO: DEVELOP A "CHAMPION" AND PLANNING TEAM

This project is going to need a lead planner and some support to make happen. When looking at the program, many departments utilize someone that has an interest in aviation or has their drone at home. This usually is the default, however; if you can get your operations planners involved in developing the concept and bringing it to life, it will be more effective. Appoint someone to take the lead in the purchasing, coordination meetings, and collecting the data needed to provide to decision makers. We will continue to add recommendations here to help you.

STEP THREE: KEEP THE MISSION IN MIND

Start with your mission. What is the mission of your unit/department and what types of operations can the drone support. Remember, the drone is a tool, and what it carries could help you achieve your mission in either a shorter period, or more efficiently. Take some time to write down some ideas on how a program can support what you already do, and what a system can do to enhance or improve on that. Then take a few minutes to think through how a program can give additional capabilities that can allow you to do more tasks than you already do. To do this begin to read our [news feeds](#) on different sUAS usages. By reading case studies, it will help you brainstorm concepts based on what others are doing.

STEP FOUR: GET AT LEAST ONE PERSON A PART 107 LICENSE & APPLY FOR A COA

One of the smoothest transitions we see is from a department that either has a Part 61 pilot already or one where the lead planner gets their Part 107 license (sUAS Pilot in Command License). The reason that this helps when you receive the aircraft from purchasing. You will instantly be able to get hands-on training and utilize the sUAS for operations if your department desires. Determine if your department wants to only have Part 107 pilots or receive a Certificate of Authorization (COA). There are benefits to both, questions feel free to contact us. If you go the COA route, receive a “CAPS” login and begin creating your Certificate of Authorization.

STEP FIVE: DEVELOP A SUAS NEEDS STATEMENT

Create an [operational needs statement](#) by taking the concepts you brainstormed in “KEEP MISSION IN MIND.” Then explain how those missions will help save lives, either of citizens or of employees. For instance, a sUAS allows roof inspectors to conduct their inspections without climbing on ladders, climbing on the roof. By using a sUAS, the roofer now saves XX amount of time because they do not have to rig-up, set up the ladder, climb, take pictures, climb down, take off the rig, etc. It also could decrease the risk to the employee by X amount because they no longer will need to climb 90% of the roofs. For a fire department, how many lost persons are within the area per year. Take that number and estimate that a drone will find individuals faster with fewer resources than before. Now as mobilizations are going out for search teams, the drone is utilizing thermals to find that individual. If found quickly less money and time is spent to save a life. This statement will be a concise concept of how you plan to utilize these tools and roughly how much time/risk you will mitigate because you have the new tool.

STEP SIX: DEVELOP AN EQUIPMENT REQUEST LIST

This is where you identify what capabilities you will need to conduct the missions with your drone that you desire. To help you with this [CHECK OUT THIS VIDEO](#). Watch the video; it will help you brainstorm different types of equipment. At this point contact [MACATAWA UNMANNED](#) for support on putting the right equipment together for your needs and giving you a quote for the price of the equipment.

STEP SEVEN: DEVELOP A TRAINING PLAN

You are most likely going to want more than one pilot, and you will need to develop your visual observers, night flight operations, and other mission capabilities. Start with getting drone pilots and visual observer training to include ground and flight training. Contact [MACATAWA UNMANNED](#) for a tailored training plan based on your needs and a pricing concept.

STEP EIGHT: DEVELOP A DECISION BRIEFING

Take the needs statement and develop a sUAS decision briefing for the decision makers. Email us at info@macatawaus.com for a briefing format example with recommended case studies.

STEP NINE: BRIEF THE DECISION-MAKING AUTHORITIES

The best success that we see is when the department head briefs the decision makers. For instance, an emergency manager briefing their county commissioners. When you take your needs statement with your decision briefing discussing how this new technology can save lives, it is easy for the commission to see the value in a public department having the tools.

STEP TEN: ORDER THE PRODUCTS

Order products from reputable companies with references. An even better method is to ensure that the company is a dealer for the equipment that you want to purchase. There are many companies out there claiming to supply you with the products, which many can, however; they will not provide the service or knowledge you need unless they are authorized dealers. Macatawa Unmanned is an authorized dealer for DJI, PropellerAero, sUAS FLIR, and many another state of the art sUAS products and accessories.