

CHAPTER 4

TRAINING

TABLE OF CONTENTS

<u>GENERAL</u>	4-3
Requirements	4-3
Training Types	4-3
Training Materials	4-3
Evaluation Standards.....	4-3
<u>MANAGEMENT TRAINING</u>	4-3
<u>DIVISION SMALL UNMANNED AIRCRAFT SYSTEM COORDINATOR</u>	4-4
Familiarization Training.....	4-4
Recurrent Training	4-4
Remedial Training.....	4-4
Specialized Training.....	4-4
<u>REMOTE PILOT IN COMMAND</u>	4-4
Initial Training	4-4
Annual Proficiency Testing.....	4-6
Recurrent Training	4-6
Specific Training	4-6
Noncompliance	4-6
Flight Evaluation/Training Results	4-7
<u>OUT-SERVICE TRAINING</u>	4-7
<u>ANNEX</u>	
<u>A</u> – CHP 321, sUAS TRAINING PROFICIENCY EVALUATION.....	4-9

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CHAPTER 4

TRAINING

1. GENERAL.

- a. Requirements. Small Unmanned Aircraft Systems (sUAS) program managers, Division sUAS coordinators, and sUAS remote pilots in command (RPIC), shall be trained and certified as specified in this chapter.
- b. Training Types. The Department shall provide or ensure the availability of initial, recurrent, and if necessary, remedial sUAS specific proficiency training.
- c. Training Materials. The Office of Air Operations (OAO) will maintain a syllabus and materials for any internal training programs. The OAO will also provide materials for familiarization training for personnel involved in the sUAS program who do not require remote pilot certification. Training materials shall be reviewed and updated as necessary to be in compliance with current Federal Aviation Administration (FAA) regulations.
- d. Evaluation Standards. The RPIC shall show proficiency in basic aeronautical knowledge as it relates to the use and operation of departmental sUAS assets, and successfully complete the departmentally approved training course.
 - (1) Departmental personnel shall demonstrate adequate operational control of sUAS through a skills evaluation as outlined on the CHP 321, sUAS Training Proficiency Evaluation (Annex A).
 - (2) The RPIC may be re-evaluated by the Department's sUAS coordinator or designated evaluator at the discretion of the RPIC's commander.

2. MANAGEMENT TRAINING. Due to the complex nature of sUAS operations, Division sUAS managers involved in the program may require familiarization training to assist them with their responsibilities and duties. Familiarization training is also available for Division commanders and Assistant Chiefs and can be provided upon request. Requests for this training shall be coordinated through the sUAS Division coordinator.

3. DIVISION SMALL UNMANNED AIRCRAFT SYSTEM COORDINATOR.

a. Familiarization Training. All new Division sUAS coordinators shall receive familiarization training from OAO personnel or selected sUAS Division coordinators. Division sUAS coordinators shall meet the requirements of an RPIC. Division sUAS coordinators should become familiar with sUAS operational issues unique to their Divisions.

b. Recurrent Training. Division sUAS coordinators shall complete all recurrent training required by the FAA. Any policy changes, legal updates, "lessons learned," or best practice information disseminated from OAO or Division coordinators shall be reviewed on an annual basis. All sUAS Division coordinators or associate sUAS Division coordinators are required to attend statewide sUAS Division coordinator meetings when scheduled.

c. Remedial Training. Division sUAS managers may coordinate with OAO to obtain remedial training for sUAS Division coordinators. The training will be approved by OAO and based on identified needs. Remedial training performed by OAO will be documented by memorandum and forwarded to the affected Division sUAS manager within 30 days following the conclusion of the training.

d. Specialized Training. Division sUAS coordinators may pursue sUAS specialized out-service training (OST). Requests for this training should be coordinated through the OAO and will be provided as funds are available. Upon completion of specialized training, Division sUAS coordinators may schedule optional Division sUAS training days for RPICs to further their skills and knowledge, and enhance mission success.

4. REMOTE PILOT IN COMMAND.

a. Initial Training. The RPIC shall pass an initial FAA, Title 14 Code of Federal Regulations (CFR), Part 107 aeronautical knowledge test at an FAA approved knowledge testing center prior to attending the OAO approved departmental remote pilot basic training course. The remote pilot basic training course shall include:

(1) Ground Portion.

(a) FAA rules pertaining to sUAS flight operational limitations.

(b) Departmental policies and procedures.

(c) State and local regulations related to sUAS use.

- (d) Flight management software.
- (e) Preflight/postflight checklists.
- (f) Aviation safety culture.
- (g) Crew resource management.
- (h) Aeronautical decision making.
- (i) Weather.
- (j) Thermography.
- (k) Night flight.
- (l) Platform familiarization.
- (m) Mapping.
- (n) Data retention and security.

(2) Flight Portion.

- (a) Basic flight maneuvering.

(3) Prior to conducting high-risk obstructed and/or interior missions, the RPIC shall pass an OAO departmentally approved remote pilot advanced training course in addition to the remote pilot basic training course. The advanced training course will include at minimum:

- (a) The ability to demonstrate proficiency in operations designed for interior or high-risk flights.

- (b) The ability to demonstrate proficiency in operations outside of the visual line of sight.

- (c) The ability to demonstrate proficiency in operations in confined space flight.

(4) The RPIC shall perform and pass the ground and flight portions of the CHP 321 (Annex A). Results of the annual proficiency test will be uploaded and documented within OAO approved flight management software. In the absence of an electronic flight management software, documentation will follow the procedures outlined in Chapter 7, Mission and Flight Reporting, of this manual.

b. Annual Proficiency Testing. Within one year, and no later than 30 days from the RPIC's certification anniversary date, the OAO, Division coordinator, or remote training pilots shall re-evaluate the RPIC's proficiency in operating sUAS. The RPIC shall perform and pass the ground and flight portions of the CHP 321. The RPIC need only perform and pass the proficiency test to highest level of the expected missions, within the next year (interior flight will require the RPIC to perform and pass the ground and advanced only portions of the CHP 321).

(1) Results of the annual proficiency test will be uploaded and documented within the OAO approved flight management software. In the absence of electronic flight management software, documentation will follow the procedures outlined in Chapter 7 of this manual.

c. Recurrent Training. The RPIC shall complete recurrent training required by the FAA. Any policy changes, legal updates, "lessons learned," or best practice information disseminated from OAO or Division coordinators shall be reviewed on an annual basis.

d. Specific Training. The RPIC shall become familiar with the controls and operational characteristics of any sUAS prior to deployment in the field. Division coordinators or other RPICs already experienced with a particular sUAS should provide familiarization training.

e. Noncompliance. An RPIC deficient on required recurrent training or otherwise not compliant with current FAA regulations shall not operate an sUAS until they are brought back into compliance with current FAA regulations. Any RPIC not meeting recurrent training requirements shall not act as an RPIC until:

(1) Training requirements are met, or

(2) The Division sUAS manager temporarily rescinds the restriction until training requirements are met.

(a) The rescinded restriction shall be documented on the RPIC's monthly flight time report. Additionally, the sUAS Division coordinator shall notify OAO with a brief explanation of why the training requirements were not met.

(b) The RPIC must satisfactorily complete required training to correct deficient requirement as soon as possible.

f. Flight Evaluation/Training Results. A remote pilot who does not complete, or is rated as "Needs Improvement" (NI) for any maneuver/event(s) listed on the appropriate evaluation checklist, shall not act as an RPIC of departmental sUAS. The "No RPIC" status shall remain in effect until an overall performance evaluation

has been rated as "Satisfactory" by the OAO, Division sUAS remote training pilot, or sUAS Division coordinator who is qualified as a remote training pilot.

(1) In any subsequent evaluation, in addition to the maneuvers/tasks rated as NI, the sUAS coordinator or sUAS remote training pilot has the discretion to reevaluate the pilot on any or all maneuvers/tasks.

(2) If an RPIC or trainee fails to meet performance standards, a brief training action plan should be developed. This training will be conducted by the OAO, Division sUAS remote training pilot, or sUAS Division coordinator who is qualified as a remote training pilot.

(3) If, after completion of the training action plan and upon initial reevaluation, the overall performance rating remains NI, the pilot, RPIC, or trainee is no longer qualified to operate departmental sUAS. The Division sUAS manager shall be notified, and any further action will be completed at the Division level.

5. OUT-SERVICE TRAINING. The unique and critical nature of missions performed by members of the sUAS program requires specific knowledge to optimize job performance.

a. All sUAS Out-Service Training (OST) shall be approved by the OAO commander.

b. A CHP 50, Request for Out-Service Training, shall be forwarded to the OAO training coordinator for processing.

(1) The OAO will prepare and submit the required CHP 50s for training involving sUAS personnel from multiple Divisions.

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ANNEX A

CHP 321, sUAS TRAINING PROFICIENCY EVALUATION

STATE OF CALIFORNIA DEPARTMENT OF CALIFORNIA HIGHWAY PATROL				FLIGHT DATE	CERTIFICATION TYPE
sUAS TRAINING PROFICIENCY EVALUATION				10/01/2024	<input checked="" type="checkbox"/> Basic <input type="checkbox"/> Advanced
CHP 321 (New 3-25) OPI 018					
sUAS PILOT NAME		I.D. NUMBER	FAA CHP NUMBER	EVALUATION TYPE	
Officer K. King		21761	FA3EWYA97C	<input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual Proficiency	
sUAS AIRCRAFT	LIGHTING CONDITIONS	WIND	GROUND INSTRUCTOR	FLIGHT INSTRUCTOR	
DJI Mavic 3T	Day	Low	Sgt. K. Rose	Sgt B. Mitchell	
GRADING CRITERIA INITIAL AND RECURRENT: 1—Unacceptable 2—Improvement Needed 3—Meets Standards 4—Exceeds Standards 5—Outstanding					
MANEUVER/EVENT	GRADE	MANEUVER/EVENT	GRADE	MANEUVER/EVENT	GRADE
A. GROUND INSTRUCTION		B. FLIGHT BASICS		D. GENERAL	
1. Applicable Regulations	3	16. Pre-Flight	3	24. Composure	3
a. FAA: 14 CFR Part 107		a. Propeller Check		25. Safety	3
b. Certificate of Waiver or Authorization		b. Arms Locked Out		26. Collision Avoidance	3
c. State Regulations		c. Home Point Set		27. Judgement	3
d. CHP Policy		17. Takeoffs/Landings	3	28. Techniques	3
e. CHP Reporting		a. T/O Stabilized		29. Planning	3
f. Miscellaneous Regulations		b. Auto Land		30. Attitude	3
2. Airspace	3	c. Landing, Stabilized		31. Alertness	3
a. Classification		d. Landing, Accuracy			
b. Operating Requirements		18. Hover (All at 50' or 100' Altitude at a Distance of 100')	4		
c. Temporary Flight Restrictions		a. Stationary			
d. Controlled Airspace		b. Stationary 360			
e. Uncontrolled Airspace		c. Side to Side 100' Laterally			
f. Special Use Airspace					
g. Notices to Airmen		C. FLIGHT MANEUVERS		E. ADVANCED ONLY	
3. Weather	4	19. Distant Flight	4	32. Beyond Visual Line of Sight	NA
4. sUAS Set Up and Breakdown	4	a. 300' Distance and Hold at 100' Altitude		a. T/O Stabilized	
5. Emergency Procedures	3	b. 300' Distance, 100' Altitude. Maneuver Left, Right, Forward, and Back 50'		b. Landing Accuracy	
6. Crew Resource Management	5	c. 300' Distance, 100' Altitude. Maneuver at Instructor Discretion		c. Obstacle Course	
7. Aeronautical Decision Making	3	20. Emergency Recovery	3	33. Confined Space	NA
a. Risk Management		a. Recovery to Level Flight and Return Home		d. Spatial Awareness	
b. Hazard and Risk		b. Return to Home/Launch Location		e. Crash Avoidance	
c. Human Factors		21. Box Pattern	3	f. Obstacle Course	
d. Decision Making Process	3	a. Camera Forward Along Path		34. Interior Flights	NA
e. Situational Awareness		b. Camera Inward to Center		g. Spatial Awareness	
8. Night Operation Requirement	3	c. Camera Away Throughout		h. Crash Avoidance	
9. Maintenance and Preflight		22. Failsafe	3	i. Obstacle Course	
10. Flight Management System	3	23. Obstacle Course	3	j. Entry/Exit	
11. Aviation Safety Culture	3			k. Landing Accuracy	
12. Crew Resource Management	3			l. Purch/Surveillance	
13. Thermography	3				
14. Mapping	3				
15. Data Retention	3				

No Prior Editions

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COMMENTS

The purpose of this training was for your initial departmental certification. It was obvious you came prepared and have spent some time at the controls prior to attending this training.

You did a great job on your evaluation flight. Congratulations!

FLIGHT RESTRICTIONS

Interior, BVLOS, and Confined Space are not to be flown until qualified in the departmental advanced course

None No changes Reviewed

sUAS PILOT INITIALS	DIVISION sUAS COORDINATOR INITIALS	sUAS REMOTE TRAINING PILOT INITIALS	EXAMINER'S/INSTRUCTOR'S SIGNATURE & I.D. NUMBER
KK	KR	BM	