Georgia Department of Public Safety Policy Manual

SUBJECT	POLICY NUMBER
SMALL UNMANNED AIRCRAFT SYSTEM	25.12
OPERATIONS	
DISTRIBUTION	DATE
ALL EMPLOYEES	5/18/2020
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25.12.1 Purpose

The purpose of this policy is to establish guidelines for personnel of the Georgia Department of Public Safety ("DPS" or "the Department") in utilizing Small Unmanned Aircraft Systems in their official capacities, for law enforcement and public safety purposes, and in accordance with law.

25.12.2 Policy

It is the policy of the Georgia Department of Public Safety that only duly trained and authorized DPS personnel may deploy and use small unmanned aircraft systems (SUAS) for lawful and authorized purposes when such use is appropriate in the performance of their official duties. Such deployment and use, together with the collection and retention of any recordings or other data generated by the SUAS must be conducted in accordance with state, local and federal laws and regulations, as well as in compliance with DPS policy provisions.

25.12.3 Definitions, Titles, and Abbreviations

For the purpose of this policy:

- A. Digital Multimedia Evidence (DME) Digital recording of images, sounds, and associated data collected by a SUAS.
- B. Unmanned Aircraft (UA) or Unmanned Aerial Vehicle (UAV) An aircraft that is intended to navigate in the air with a remote Pilot In Command, and without an onboard pilot. Consistent with FAA regulations, a UA or UAV utilized by DPS shall weigh less than 55 pounds.
- C. Small Unmanned Aircraft System (SUAS) A UA or UAV and the equipment, communications link, software programs, and network necessary for the safe and efficient operation and control of such aircraft.
- D. SUAS Ground Crew: At a minimum, a Pilot In Command, but could consist of multiple DPS personnel designated to assist during SUAS operations.
- E. SUAS Program Manager Shall be designated by the DPS Commissioner.
- F. SUAS Assistant Program Manager Shall be designated by the DPS Commissioner.

- G. SUAS Pilot In Command Certified FAA Remote Pilot with a small SUAS rating, who exercises control over an SUAS operation.
- H. SUAS Observer Designated by the Pilot In Command, if needed, for SUAS flight to assist the SUAS Pilot In Command to observe, locate and avoid other air traffic, and obstacles or objects aloft or on the ground.
- I. FAA Federal Aviation Administration
- J. CFR Code of Federal Regulations
- K. ATC Air Traffic Control
- L. FARs Federal Aviation Regulations
- M. COA Certificate of Waiver or Authorization
- N. SGI Special Governmental Interest

25.12.4 Procedures

All deployments of SUAS must be specifically authorized by the DPS Commissioner or authorized supervisory personnel, as discussed within this SUAS policy.

A. Personnel:

The SUAS will be operated only by DPS personnel who have been assigned to, trained, and certified in the operation of the system.

1. SUAS Program Manager

The authority, duties, and responsibilities of the SUAS Program Manager shall include, but are not limited to the following:

- a. Maintains a current list/database(s) of:
 - 1) SUAS equipment
 - 2) DPS employees with a FAA Remote Pilot In Command Certificate
 - 3) SUAS Observers, including training records and SUAS incidents/accidents
 - 4) Internal and external training records of Pilots In Command and Observers
 - 5) SUAS incidents/accidents as defined by federal aviation regulations, etc.
 - 6) DPS SUAS Flight Records
 - 7) UAV registrations
- b. Approves SUAS purchase/lease application forms, or requests for the purchase or lease of SUAS equipment and software programs. A list of

criteria that must be met for the approval of purchases and leases will be developed by the SUAS Program Manager and reviewed for approval by DPS Procurement and Legal Services.

- c. Approves requests by DPS employees to study, train or test for their FAA Remote Pilot In Command Certificate as required in the CFR and as submitted on a SUAS Pilot In Command Certificate and Training Request Form.
- d. Ensures compliance with this SUAS policy and other DPS policies.
- e. Ensures compliance with all applicable federal and state laws.
- f. Serves as the Department's liaison to the FAA.
- g. Investigates, in conjunction with the Office of Professional Standards, any alleged unsafe or dangerous acts committed during SUAS flight operations.
- h. Responds to external requests for SUAS support.
- i. Provides the FAA with any required data, information, access to or documentation of DPS SUAS personnel and equipment.
- j. Obtains and manages FAA waivers including COAs, SGI Waivers, etc.
- 2. SUAS Pilot In Command
 - a. No DPS personnel shall be a Pilot In Command until he or she has first obtained an FAA Remote Pilot In Command Certificate with a small SUAS rating, sent proof of the certificate to the SUAS Program Manager, and completed any initial training required by the SUAS Program Manager. All requests to study, train, or test for the SUAS Remote Pilot In Command Certificate, shall be forwarded through their chain of command for approval. The DPS SUAS Pilot In Command Certificate and Training Request Form must be submitted to the SUAS Program Manager. No DPS employee may take the FAA Remote Pilot In Command Certification test before obtaining approval from the DPS SUAS Program Manager.
 - b. DPS employees who already have an SUAS Pilot In Command Certificate or obtain an SUAS Pilot In Command Certificate on their own must be approved by the SUAS Program Manager before they can operate a UA/UAV for or on behalf of DPS. No DPS employee will be reimbursed for any costs associated with obtaining an SUAS Pilot In Command Certificate on their own.
 - c. All SUAS Pilots In Command have the following authority, duties and responsibilities:
 - 1) Completes the DPS SUAS Preflight Check Form and maintains it for a period to be determined by the SUAS Program Manager.
 - 2) Files all required forms with the SUAS Program Manager in a timely manner, including but not limited to the DPS SUAS Flight Report.
 - 3) Understands the flight operation plan and has all applicable documentation at the ground control station before each launch.

- 4) Seeks, and operates consistent with the appropriate awareness of weather forecasts, winds, hazards, temporary flight restrictions, and all pertinent information necessary to perform each flight operation.
- 5) Dutifully self-assesses his/her physical and mental condition during preflight activities, as prescribed by FAA guidelines. If any mental or health problems could reasonably be expected to affect an SUAS Pilot's ability to perform flight duties, he/she shall not serve in any role during SUAS operations, and shall promptly inform their immediate supervisor.
- 6) Maintains an appropriate level of understanding of all FARs applicable to the airspace as well as 14 CFR Part 107 and the requirements set forth in an applicable COA.
- 7) Reads, understands, and complies with contents of the specific Operator's Manual for each UA/UAV he/she operates, to the extent each manual requirement is consistent with DPS policy and procedure.
- 8) Holds direct responsibility for and is the final authority over the actual SUAS operation. Therefore, the SUAS Pilot In Command has absolute authority to reject or discontinue a flight based on safety concerns or a potential violation of FAA regulations.
- 9) Timely seeks and maintains recertification for his/her Remote Pilot Certificate with a small UAS rating as required by the FAA.
- 10) Briefs the SUAS Observer(s) before each flight operation to ensure a consistent understanding of each operation.
- 11) Complies with all Operational Standards set forth below.
- 12) Completes all required, recurrent training outlined in this policy.
- 13) Maintains the amount of flight time per year as required by the SUAS Program Manager.
- 3. SUAS Observer
 - a. The SUAS Observer is designated by the SUAS Pilot In Command for each SUAS flight operation to assist the SUAS Pilot In Command to see and avoid other air traffic, obstacles or objects aloft or on the ground.
 - b. Depending on the details of the flight operation, multiple observers may be utilized, as determined by the SUAS Pilot In Command and/or the SUAS Program Manager.
 - c. All SUAS Observers have the following authority, duties and responsibilities:
 - Reads, understands, and complies with the contents of the specific Operator's Manual for each UA/UAV, to the extent each such manual requirement is consistent with DPS policy and procedure. This includes but is not limited to the features, settings, and limitations of the UA/UAV being operated by the SUAS Pilot In Command.

- 2) Attends and complies with any briefing prior to each flight operation by the SUAS Pilot In Command to ensure a consistent understanding of each operation.
- 3) Dutifully self-assesses his/her physical and mental condition during preflight activities, as prescribed by FAA guidelines. If any mental or health problems could reasonably be expected to affect an SUAS Observer's ability to perform flight duties, he/she shall not serve in any role during SUAS operations, and shall promptly inform the Pilot In Command.
- 4) Assists the SUAS Pilot In Command in not allowing the UA/UAV to operate beyond the line of sight. The SUAS Observer must be able to see the UA/UAV and the surrounding airspace, so as to sufficiently assist the SUAS Pilot In Command in determining the proximity to all hazards.
- 5) Complies with all use and standards of operation in this SUAS policy.
- 6) Maintains effective communication with the SUAS Pilot In Command during an SUAS flight or operation.
- B. Authorized Use

DPS has adopted the use of an SUAS to provide an aerial visual perspective in responding to emergency situations and exigent circumstances, and for the following objectives:

- 1. Scene Documentation: To document or assist DPS in investigating, acquiring evidence, and understanding the nature, scale, and scope of the following:
 - a. Crash scenes;
 - b. Outdoor crime scenes when requested by the Georgia Bureau of Investigation, local or federal agencies;
 - c. Disaster Management, including a declared "state of emergency" by the Georgia Governor (*e.g.* weather, disaster or energy emergency).
- 2. Situational Awareness: To assist DPS Command Staff in understanding the nature, scale, and scope of a large event and for planning or coordination of an effective response and/or security, including:
 - a. Sports event (e.g. Super Bowl, Peachtree Road Race, etc);
 - b. Parade; and
 - c. Outdoor Concert or Celebration.
- 3. Search and Rescue: To assist with missing person investigations, AMBER Alerts, Silver Alerts, etc.
- 4. Visual Perspective: To provide an aerial view to assist officers in the following, including, but not limited to:
 - a. Providing direction for crowd control;

- b. Traffic incident management;
- c. Temporary security for monitoring crowds during civil unrest and protests;
- d. DPS training events, such as Mobile Field Force, Driver's Training, Firearms, or any other event where photographs and video would be useful training aids; and
- e. Demonstrations conducted for schools, public safety events, where members of the Department are asked to participate for public relations purposes, or for officer recruitment at recruiting events.
- 5. Tactical Deployment: To support the tactical deployment of members and equipment in emergency situations, large-scale tactical operations, and for temporary perimeter security, in the following limited ways:
 - a. DPS SWAT may utilize the DPS SUAS during the following scenarios or any other situation deemed necessary by the SWAT Command:
 - 1) Reconnaissance/Overwatch
 - 2) Hostage Situation
 - 3) Felony Warrant
 - 4) Building Clearing
 - 5) Fugitive Searches
 - 6) Dive Team
 - a) Recovery/Overwatch
 - b) Waterway Searches
 - b. Nuclear Radiological Detection Team (NRAD) may utilize the DPS SUAS during the following scenarios or any other situation deemed necessary by the Motor Carrier Compliance Division Special Operations Coordinator:
 - 1) Overwatch
 - 2) Surveillance (after having obtained any necessary warrant(s))
 - 3) Detection
 - 4) Any mission deemed necessary by the SUAS Program Manager, Commanding Officer, or his/her designee.
- C. Unauthorized Use
 - 1. A UA/UAV will not be flown directly over crowds or people without the appropriate FAA/SGI waiver.
 - 2. No part of any SUAS assigned to the Department of Public Safety shall be used for personal or commercial purposes. DPS SUAS flights are limited specifically to serve the interests of the Department or other public safety missions.

- 3. No equipment, including cameras or video equipment, shall be attached to any UA/UAV other than that for which it was designed, and that has been purchased by the Department specifically for use with assigned SUAS equipment.
- 4. The SUAS shall not be deployed or used except as authorized above, and in compliance with law. Where there are specific articulable grounds to believe that the SUAS will collect evidence of criminal wrongdoing and, if the SUAS will be used in a manner that may intrude upon reasonable expectations of privacy, DPS personnel shall not operate the SUAS or conduct the flight without obtaining a search warrant.
- 5. The SUAS shall not be operated in an unsafe manner or in violation of FAA rules and regulations.
- 6. The SUAS shall not be equipped with weapons of any kind.
- D. Flight Procedures
 - A pre-flight inspection will be conducted by the Pilot In Command prior to each flight. The SUAS will be inspected for mechanical soundness and readiness for flight. In accordance with Title 14 CFR Part 107, a flight report log will be maintained and made available to FAA inspectors upon request. This log will include the date, location, time, case number, and badge numbers of the ground crew.
 - 2. Prior to flight, the SUAS Pilot In Command is required to be aware of weather forecasts, winds, hazards, temporary flight restrictions, and all pertinent information necessary to perform the flight operation. Weather conditions are to be recorded in the flight log.
 - 3. Communication links between the SUAS and ground crew equipment will be verified prior to flight. No flight shall be conducted if communication links are not certain prior to launch.
 - 4. The Pilot In Command must consult aviation charts prior to any flight. If SUAS operations are to be conducted within any controlled airspace, the corresponding ATC Facility must be notified prior to launch. Upon completing SUAS operations, the corresponding ATC Facility must also be notified. ATC will be notified prior to the operation utilizing the FAA UAS Data Exchange (Low Altitude Authorization and Notification Capability) or by cell phone communication. Within Class B, C, and D airspaces the ground crew shall monitor the appropriate ATC Frequency as listed on aviation charts for the area.
 - 5. The Pilot in Command must file an SUAS Flight Plan with the corresponding Troop Communications Center prior to the operation.
 - 6. While airborne, the UA/UAV must be within the visual line of sight of at least one SUAS Ground Crew Member. The Ground Crew will ensure prior to flight that any obstructions to line of sight or communication links are considered.
 - 7. No flight will exceed 400 feet above ground level, without the appropriate waiver.
 - 8. The SUAS Pilot In Command will implement reasonable precautions to protect reasonable expectations of privacy.

- 9. When flights are conducted over a roadway, as when photographing a crash scene, the UA/UAV will not be flown over traffic. All traffic must be halted while SUAS operations are in progress directly over a roadway. Vehicles and personnel on scene such as fire, ambulance and law enforcement are considered part of the investigation and are excluded from this prohibition; however, on-scene personnel should be made aware of SUAS operations prior to flight.
- 10. The Pilot In Command should activate take off from land and return to land at the point of origin. Care should be taken when selecting an appropriate area from which to conduct SUAS operations. Also, since circumstances may change on the ground during flight, an alternate location for landing should be identified as soon as possible should it be necessary.
- 11. 14 CFR Part 107 as well as all applicable state and federal laws must be followed during the operation of the SUAS, with exceptions listed in applicable waivers.
- E. Post-Flight Actions

After completion of the flight operation, the SUAS Pilot In Command will complete the DPS SUAS Flight Report and submit this to the SUAS Program Manager within 24 hours of the SUAS flight, with exceptions to this requirement to be made in limited and emergency circumstances.

- F. Emergency Procedures
 - 1. Emergency Procedures stated in the manufacturer's operations manual shall be complied with for all SUAS operations. In the event of an emergency involving the safety of persons or property, the Pilot In Command may deviate from the procedures of this directive relating to aircraft, equipment, and weather minimums to the extent required to meet the emergency.
 - 2. No member of the Department, regardless of involvement in an emergency situation, shall make any statements to the general public or to news-gathering agencies without the knowledge and approval of the Director of the Public Information Office.
 - 3. Lost Link A loss of command-and-control link contact with the UAV such that the remote pilot can no longer manage the aircraft's flight and as a result of the control loss the UA is not operating in a predicable or planned manner.
 - a. Loss of UAV Flight Control (Lost link):
 - 1) The UAV lost link procedures shall be initiated which shall automatically cause the UAV to climb to its ceiling altitude and return to and land at the launch site. If positive control of the UAV cannot be maintained and the UAV is leaving the operation area or the UAV poses a risk to life and/or property the Pilot In Command will continue to attempt to reestablish the link and notify the flight crew and ATC. In the event of a lost link during flight the Pilot In Command will document the lost link in their flight log.
 - 2) Loss of GPS signal. Should the UAV lose GPS signal during autonomous operations, the Pilot In Command must command the UAV into manual mode until the GPS signal can be reacquired. If the GPS signal cannot be reacquired the Pilot In Command will land as soon as

practical. If positive control of the UAV cannot be maintained and the UAV departs the operation area or the UAV poses a risk to life and/or property the Pilot In Command will issue an Engine Kill command.

- 3) In the event of a lost communication link between the SUAS Ground Crew and the UAV, the Pilot in Command must immediately report the last known location, altitude, and direction of travel to Air Traffic Control officials if operating in controlled airspace. Furthermore he/she must contact the appropriate Troop Communications Center and advise, and have the information relayed to the appropriate 911 Communications Center. Every effort must be made to maintain visual contact with the SUAS, and to re-establish communication.
- 4. Loss of Visual Contact. If visual contact with the UAV is lost, unless special circumstances dictate, the Pilot In Command shall command the aircraft into a hover mode and the Pilot In Command and/or SUAS Observer shall try to reestablish visual contact. If visual contact cannot be re-established within a reasonable amount of time determined by the Pilot In Command, then lost link procedures shall be executed.
- 5. Loss of UAV Power (Engine Failure)/UAV Crash. In case of an equipment failure, the UAV will not be able to maintain flight. The Ground Crew will immediately attempt to locate the UAV, assess the scene for injuries, and render first aid if necessary.
- 6. Flight Termination. The intentional and deliberate process of performing controlled flight into terrain (CFIT). Flight termination must be executed in the event that all other contingencies have been exhausted, and further flight of the aircraft cannot be safely achieved, or other potential hazards exist that require immediate discontinuation of flight.
- 7. Accident Notification and Investigation: All in-flight accidents and incidents involving fatalities, injuries, property damage, and lost link shall be reported to the supervisor on scene immediately for appropriate assistance with guidance. In the event of an accident the Pilot In Command is responsible for reporting the accident to the SUAS Program Manager. The NTSB, FAA Part 107 and Public Aircraft Operations (PAO) COA all have different time frames and criteria for UAV incident reporting.
 - a. In accordance with 49 CFR § 830.5, the Pilot In Command shall immediately contact the NTSB's 24 hour Response Operations Center (ROC) at 844-373-9922 when an aircraft accident or any of the following listed serious incidents occur: flight control system malfunction or failure, in-flight fire, aircraft collision in flight, damage to property, other than the aircraft, estimated to exceed \$25,000 for repair (including materials and labor) or fair market value in the event of total loss, whichever is less.
 - b. If the flight occurred under FAA 14 CFR § 107 the Pilot In Command, within 10 days, must report to the FAA via the DroneZone portal any operation in which any of the following conditions apply, serious injury to any person or any loss of consciousness; or damage to any property, other than the small unmanned aircraft, unless one of the following conditions is satisfied: the cost of repair (including materials and labor) does not exceed \$500; or the fair market value of the property does not exceed \$500 in the event of total loss.

- c. If the flight occurred under FAA 14 CFR § 91 PAO COA the Pilot In Command, within 24 hours, must provide initial notification to the FAA via email at 9-AJV-115-UASOrganization@faa.gov and via the CAPS forms (Incident/Accident) if the accident meets the following criteria:
 - 1) Fatal injury, where the operation of a UAS results in a death occurring within 30 days of the accident/mishap.
 - 2) Serious injury, where the operation of a SUAS results in: hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received, a fracture of any bone (except simple fractures of fingers, toes, or nose), severe hemorrhages, nerve, muscle, or tendon damage, involving any internal organ; or involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.
 - 3) Total unmanned aircraft loss.
 - 4) Substantial damage to the unmanned aircraft system where there is damage to the airframe, power plant, or onboard systems that must be repaired prior to further flight.
 - 5) Damage to property, other than the unmanned aircraft.
 - 6) Any incident/mishap that results in an unsafe/abnormal operation including but not limited to a malfunction or failure of the unmanned aircraft's on-board flight control system (including navigation), a malfunction or failure of ground control station flight control hardware or software (other than loss of control link), a power plant failure or malfunction, an in-flight fire, an aircraft collision involving another aircraft, any in-flight failure of the unmanned aircraft's electrical system requiring use of alternate or emergency power to complete the flight, a deviation from any provision contained in the COA, a deviation from an ATC clearance and/or Letter(s) of Agreement/Procedures, a lost control link event resulting in fly-away, or execution of a pre-planned/unplanned lost link procedure.
- G. Property Damage and Injuries
 - 1. All accidents causing damage to the SUAS or property and/or injuries must be reported immediately by the SUAS Ground Crew members to their immediate supervisor and the SUAS Program Manager.
 - 2. The SUAS Pilot In Command shall also follow the reporting requirements of DPS Policy #17.08 Post Operations, section 17.08.3, J, 3, Departmental Property Insurance Claims.
- H. SUAS DME Retention and Management
 - 1. All DME shall be securely downloaded at the completion of each mission. The Pilot In Command will record information for each file that shall include the date, time, location, and case reference numbers or other mission identifiers—and will identify the Ground Crew Members involved in the mission.
 - 2. All access of DME must be specifically authorized by the Commissioner or his/her designee, and all access is to be audited, by the Program Manager in

conjunction with DPS Information Technology personnel, to ensure that only authorized users are accessing the data for legitimate and authorized purposes.

- 3. DPS will follow state requirements and maintain the DME, video logs, and other SUAS materials for 30 months, and more than 30 months when necessary for purposes of training, use in an ongoing investigation or prosecution, the Department's records retention or in compliance with a request for preservation of evidence.
- 4. DPS personnel shall not edit, alter, erase, duplicate, copy, share, or otherwise distribute in any manner DME without prior written authorization and approval of the DPS Commissioner or his/her designee.
- 5. Requests made subject to the Open Records Act, O.C.G.A. § 50-18-71 *et seq.*, will be sent to the DPS Open Records Unit with a copy to the Office of Legal Services. The SUAS Program Manager will assist in responding to such requests.
- I. Certificate of Waiver or Authorization

14 CFR Part 107 Part D allows for the application and issuance of a COA which permits nationwide flights in Class G airspace at or below 400 feet, self-certification of the SUAS Pilot In Command, and certain deviations from Part 107 regulations. It shall be the responsibility of the SUAS Program Manager to obtain a COA that best serves the interests of the Department.

J. Special Governmental Interest Waiver

When responding to natural disasters or other emergency situations, expedited approval to operate outside of Part 107 and COA guidelines can be obtained through the FAA's Special Governmental Interest (SGI) process. To obtain a waiver through this process, the appropriate Emergency Operation Request Form shall be sent to the FAA's System Operations Support Center (SOSC) at 9-ator-hq-sosc@faa.gov. If approved, the FAA will amend the existing COA or Part 107 SUAS Pilot In Command Certificate. This will authorize representatives of the Department to fly under certain conditions for the specified operation.

- K. Disqualification from SUAS Program
 - SUAS Pilot In Command status may be temporarily suspended at any time by the Department for a period to be determined by the SUAS Program Manager for reasons including but not limited to performance, proficiency or if found operating an UV/UAV in an unsafe manner. Should this become necessary, the SUAS Pilot In Command will be notified in writing by the SUAS Program Manager of the reason(s). In addition, disciplinary actions up to and including dismissal may be taken.
 - 2. In addition, any DPS employee found in violation of this policy is subject to disqualification from the DPS SUAS Program for a period to be determined by the SUAS Program Manager. Should this become necessary, the DPS employee will be notified in writing of the reason(s). In addition, disciplinary actions up to and including dismissal may be taken.
- L. SUAS Program Manager Reporting Requirements

The SUAS Program Manager shall prepare a report annually for the Commissioner, which shall include an inventory of SUAS equipment purchased or leased by DPS, the number of DPS SUAS Pilots In Command, the number, date and occasion of reported accidents, the number of SUAS flight missions, and a summary of the types of SUAS flight missions flown by the Department.

- M. Training Requirements
 - 1. SUAS Pilots In Command will be required to attend in-service training every six months. Biannual training will include but is not limited to FAA updates, software updates, mission profile training, etc.
 - 2. It shall be the responsibility of all Departmental SUAS Pilots In Command to maintain operational currency. One cumulative hour shall be flown every thirty days. If an SUAS Pilot In Command is responsible for multiple systems, they will be required to fly one cumulative hour per system every thirty days.
 - 3. It will be the responsibility of each SUAS Pilot In Command to maintain a logbook. Logbook entries will include date, time, system type, location, and flight time.
- N. Complaints

Any complaint received regarding an SUAS operation will be forwarded to the SUAS Program Manager. It will be the responsibility of the SUAS Program Manager to determine if the complaint will need further investigation. In the event further investigation is deemed necessary, an investigative committee consisting of the SUAS Program Manager, Assistant Program Manager, respective Unit Commander, and designated Legal Officer of the Legal Services Division, will then determine if any Policy, Title 14 CFR Part 107 Regulations, or state laws have been violated by the operation in question. A report with the committee's findings will then be submitted to the Commissioner.