

NATIONAL TRANSPORTATION SAFETY BOARD PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

This form to be used for reporting civil and public aircraft accidents and incidents

BASIC INFORMATION

Accident/Incident Location

Nearest City/Place: Toughkenamon State: PA
ZIP: 19374 Country: USA
Latitude: 39°49.83N Longitude: 75°46.19W
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 09/08/2021 Local Time: 4:00 PM
mm/dd/yyyy Time Zone: Eastern

Collision with Other Aircraft: ☐ Midair ☐ On-ground ☒ None

AIRCRAFT INFORMATION

Registration Number: N51789

Manufacturer: Enstrom

Model: F28C-2

Serial Number: 454-2

Year of Manufacture: 1978

Amateur-Built: ☐ Yes ☒ No If Yes: ☐ Kit/Plans ☐ Original Design Make: _____

- ☐ IFR-Equipped and Certified
☐ Commercial Space Flight
☐ Unmanned Aircraft

Maximum Gross Weight: 2350 lbs

Weight at Time of Accident/Incident: 2700 lbs

Number of Seats: 3 Flight Crew Seats: 0

Cabin Crew Seats: 1 Passenger Seats: 2

Number of Engines: _____

Category of Aircraft

- ☐ Airplane
☐ Balloon
☐ Blimp/Dirigible
☐ Glider
☐ Gyroplane
☒ Helicopter
☐ Powered Lift
☐ Rocket
☐ Ultralight
☐ Unknown

Type of Airworthiness Certificate (Check all that apply)

- | Standard | Special |
|---|---|
| ☒ Normal | ☐ Restricted |
| ☐ Aerobatic | ☐ Limited |
| ☐ Balloon | ☐ Provisional |
| ☐ Commuter | ☐ Special Flight |
| ☐ Transport | ☐ Experimental |
| ☐ Utility | ☐ Special Light-Sport |
| | ☐ Experimental Light-Sport |
| ☐ Certificate of Authorization or Waiver (COA) | |
| ☐ None ☒ Unknown | |

Landing Gear

- (Check all that apply)
- ☐ Retractable
- | | |
|--|--|
| ☐ Tricycle | ☐ Tailwheel |
| ☐ Amphibian | ☐ High Skid |
| ☐ Emergency Float | ☒ Skid |
| ☐ Float | ☐ Ski |
| ☐ Hull | ☐ Ski/Wheel |
| ☐ Other Launch/Recovery System | |
| ☐ None ☐ Unknown | |

Engine Type (Select one)

- | | |
|--|-------------------------------------|
| ☒ Reciprocating | ☐ Liquid Rocket |
| ☐ Turbo Shaft | ☐ Solid Rocket |
| ☐ Turbo Prop | ☐ Hybrid Rocket |
| ☐ Turbo Jet | ☐ None |
| ☐ Turbo Fan | ☐ Unknown |
| ☐ Electric | |

Fuel System Type (Reciprocating)

- ☐ Carburetor ☒ Fuel-Injected

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. mm/dd/yyyy	Rated Power ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	<u>Textron</u>	<u>H10-360-21AD</u>	<u>L-2005531A</u>	<u>1978</u>	<u>190</u>			<u>9970</u>
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

- ☐ 100-Hour ☐ Continuous Airworthiness
☐ AAIP ☐ Conditional Inspection
☒ Annual ☐ Unknown

Date Last Inspection: 04/21/2020
mm/dd/yyyy

Airframe Total Time: 3802 hrs

hours measured at (Select one)

- ☐ Last Inspection ☒ Time of Accident/Incident

Type of Maintenance Program (Select one)

- ☐ Annual
☐ Conditional (Amateur-built only)
☐ Manufacturer's Inspection Program
☐ Other Approved Inspection Program (AAIP)
☐ Continuous Airworthiness
☐ Other, specify: _____

Description of Fire Extinguishing System

- ☐ None
☐ Specify: _____

Propeller 1

- ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

Propeller 2

- ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

ELT Installed: ☐ Yes ☒ No

If Yes:

ELT Manufacturer: _____

Model or Part No.: _____

TSO No.: ☐ C91 (121.5 MHz) ☐ C91a (121.5 MHz)
☐ C126 (406 MHz)

Was ELT still mounted in aircraft? ☐ Yes ☐ No

Was ELT still connected to antenna? ☐ Yes ☐ No

Did ELT Activate? ☐ Yes ☐ No

If activated:

Did ELT Aid in Locating Aircraft? ☐ Yes ☐ No

If not activated:

- Indicate Reason: ☐ Impact Damage
☐ Fire Damage
☐ Battery Expired/Damaged
☐ Unknown

Additional Equipment (Check all that apply)

- ☒ ADS-B
☐ Airframe Parachute
☐ Angle of Attack Indicator
☐ Autopilot
☐ Data Recorder
☐ Electronic Flight Bag or Handheld Device
☐ Electronic Multifunction Display
☐ Electronic Primary Flight Display
☒ Handheld GPS
☐ Heads Up Display
☐ Onboard Weather
☐ Satellite Tracking Device
☐ Stall Warning System
☐ Video Recording Device
☐ Other, Specify: _____

OWNER/OPERATOR INFORMATION**Registered Aircraft Owner**

Name: Henry W. Marshall
Fractional Ownership Aircraft: ☐ Yes ☒ No

City: Cochranville
State: PA ZIP: 19330
Country: USA

Operator of Aircraft☒ Same As Registered Owner☐ Same Address as Registered Owner

Name: _____
Doing Business As: _____
Air Carrier/Operator Designator (4 Character Code): _____

City: _____
State: _____ ZIP: _____
Country: _____

Operating Certificates Held*(Check all that apply)*

- ☒ None
☐ Flag Carrier Operating Certificate (FAR 121)
☐ Supplemental
☐ Air Cargo
☐ Foreign Air Carriers (FAR 129)
☐ Rotorcraft External Load (FAR 133)
☐ Commuter Air Carrier (FAR 135)
☐ On-Demand Air Taxi (FAR 135)
☐ Commercial Air Tour (FAR 136)
☐ Agricultural Aircraft (FAR 137)
☐ Pilot School (FAR 141)
☐ Certificate of Authorization or Waiver (COA)
☐ Commercial Space Transportation
Experimental Permit
☐ Commercial Space Transportation License
☐ Other Operator of Large Aircraft

Regulation Flight Conducted Under

- ☒ FAR 91 ☐ FAR 129 ☐ FAR 415
☐ FAR 103 ☐ FAR 133 ☐ FAR 431
☐ FAR 121 ☐ FAR 135 ☐ FAR 435
☐ FAR 125 ☐ FAR 137 ☐ FAR 437

- ☐ FAR 91 Special Flight
☐ Non-US, Commercial
☐ Non-US, Non-commercial

☐ Public Aircraft *(Select one)*

- ☐ Armed Forces
☐ Federal
☐ State
☐ Local
☐ Unknown

Revenue Operation for FAR 121, 125, 129, 135*(Select one for each group)*

- ☐ Scheduled or Commuter ☐ Domestic
☐ Non-Scheduled or Air Taxi ☐ International

- ☐ Passenger
☐ Cargo
☐ Mail Contract Only

Purpose of Flight for FAR 91, 103, 133, 137*(Select one)*

- ☐ Aerial Application ☐ Firefighting ☐ Unknown
☐ Aerial Observation ☐ Flight Test
☐ Air Drop ☐ Glider Tow
☐ Air Race/Show ☐ Instructional
☐ Banner Tow ☐ Other Work Use
☐ Business ☒ Personal
☐ Executive/Corporate ☐ Positioning
☐ External Load ☐ Skydiving
☐ Ferry

Revenue Sightseeing Flight

☐ Yes ☒ No

Air Medical Flight

☐ Yes ☒ No

AIRPORT INFORMATION (Fill in if accident/incident occurred on approach, landing, takeoff, departure, or within 3 miles of an airport)

Airport Name: New Garden Airfield
Airport Identifier: N57
Proximity to Airport: ☐ Off Airport/Airstrip ☒ On Airport/Airstrip ☐ N/A

Distance From Airport Center: 1600' sm
Direction From Airport: 210° degrees true
Airport Elevation: 440 ft. msl

Runway Information

Runway ID: _____ (L/R/C) Length: _____ ft Width: _____ ft

Runway/Landing Surface *(Check all that apply)*

- ☐ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water
☐ Concrete ☐ Gravel ☐ Metal/Wood
☐ Dirt ☐ Ice ☐ Snow ☐ Unknown

Condition of Runway/Landing Surface *(Check all that apply)*

- ☒ Dry ☐ Snow-Compacted ☐ Water-Calm
☐ Holes ☐ Snow-Crusted ☐ Water-Choppy
☐ Ice Covered ☐ Snow-Dry ☐ Water-Glassy
☐ Rough ☐ Snow-Wet ☐ Wet
☐ Rubber Deposits ☐ Soft
☐ Slush-Covered ☐ Vegetation ☐ Unknown

Approach/Departure Segment *(Select one)*

- ☐ Taxi ☐ VFR Departure ☐ On Instrument Approach ☐ Downwind ☐ Low Approach
☐ Takeoff ☐ IFR Departure Procedure/Clearance ☒ Landing ☐ Base ☐ Go Around
☐ Initial Climb ☐ Crosswind ☐ Aborted Landing (after touchdown)
☐ Unknown

IFR Approach *(Check all that apply)*

- ☒ None
☐ ADF/NDB ☐ PAR ☐ MLS ☐ Practice
☐ SDF ☐ Sidestep ☐ LDA ☐ GPS
☐ VOR/TVOR ☐ ILS ☐ ASR
☐ VOR/DME ☐ Localizer Only ☐ Visual
☐ TACAN ☐ LOC-back course ☐ Contact
☐ RNAV ☐ Circling
☐ Unknown

VFR Approach *(Check all that apply)*

- ☐ None
☐ Traffic Pattern ☐ Stop and Go
☒ Straight-In ☐ Touch and Go
☐ Valley/Terrain Following ☐ Simulated Forced Landing
☐ Go Around ☐ Forced Landing
☐ Full Stop ☐ Precautionary Landing
☐ Unknown

"FLIGHT CREWMEMBER 1" INFORMATION

"Flight Crewmember 1" Responsibilities at the Time of Accident/Incident

☒ Pilot ☐ Co-Pilot ☐ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew

"Flight Crewmember 1" was pilot flying ☐ Yes ☐ No

"Flight Crewmember 1" Identification

First Name: Henry W. Marshall

City of Residence: Cochranville

Middle Initial: W

State: PA ZIP: 19330

Last Name: Marshall

Country: USA

Age at time of Accident/Incident: 75 Date of Birth: 1946 mm/dd/yyyy

Certificate Number: _____

Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious		Seat Occupied ☒ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single		Restraint Type <table border="0"> <tr> <th>Available</th> <th>Used</th> </tr> <tr> <td>☐ None</td> <td>☐ None</td> </tr> <tr> <td>☒ Lap only</td> <td>☒ Lap only</td> </tr> <tr> <td>☐ 3-point</td> <td>☐ 3-point</td> </tr> <tr> <td>☐ 4-point</td> <td>☐ 4-point</td> </tr> <tr> <td>☐ 5-point</td> <td>☐ 5-point</td> </tr> <tr> <td>☐ Unknown</td> <td>☐ Unknown</td> </tr> </table>		Available	Used	☐ None	☐ None	☒ Lap only	☒ Lap only	☐ 3-point	☐ 3-point	☐ 4-point	☐ 4-point	☐ 5-point	☐ 5-point	☐ Unknown	☐ Unknown	Inflatable Restraints ☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Available	Used																			
☐ None	☐ None																			
☒ Lap only	☒ Lap only																			
☐ 3-point	☐ 3-point																			
☐ 4-point	☐ 4-point																			
☐ 5-point	☐ 5-point																			
☐ Unknown	☐ Unknown																			
Pilot Certificate(s) (Check all that apply) <table border="0"> <tr> <td>☐ None</td> <td>☐ Flight Instructor</td> <td>☐ Commercial</td> <td>☐ US Military</td> </tr> <tr> <td>☒ Private</td> <td>☐ Recreational</td> <td>☐ Airline Transport</td> <td>☐ Foreign</td> </tr> <tr> <td>☐ Student</td> <td>☐ Sport</td> <td>☐ Flight Engineer</td> <td></td> </tr> </table>							☐ None	☐ Flight Instructor	☐ Commercial	☐ US Military	☒ Private	☐ Recreational	☐ Airline Transport	☐ Foreign	☐ Student	☐ Sport	☐ Flight Engineer			
☐ None	☐ Flight Instructor	☐ Commercial	☐ US Military																	
☒ Private	☐ Recreational	☐ Airline Transport	☐ Foreign																	
☐ Student	☐ Sport	☐ Flight Engineer																		
Principal Occupation ☐ Pilot ☒ Other ☐ Unknown		Medical Certificate <u>Basic Med</u> ☐ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown		Medical Certificate Validity ☒ Without limitations/waivers ☐ Unknown ☐ With limitations/waivers ☐ N/A ☐ Special Issuance		Date of Last Medical <u>03/27/2020</u> mm/dd/yyyy														

Medical Certificate Limitations

Medical Certificate Special Issuance

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: 04/25/2020 mm/dd/yyyy

Flight Review Aircraft

Make: Enstrom

Model: F280-2

Airplane Rating(s) (Check all that apply) ☐ None ☒ Single-Engine Land ☐ Single-Engine Sea ☐ Multiengine Land ☐ Multiengine Sea	Other Aircraft Rating(s) (Check all that apply) ☐ None ☐ Airship ☐ Balloon ☐ Glider ☐ Gyroplane ☒ Helicopter ☐ Powered Lift	Instrument Rating(s) (Check all that apply) ☒ None ☐ Airplane ☐ Helicopter ☐ Powered Lift	Instructor Rating(s) (Check all that apply) ☒ None ☐ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☐ Instrument Airplane ☐ Instrument Helicopter ☐ Helicopter ☐ Glider ☐ Sport
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Type Ratings

Student Endorsements (Include dates)

Flight Time (Enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	525	348								
Pilot in Command (PIC)										
Time as Instructor										
This Make/Model										
Last 90 Days										
Last 30 Days										
Last 24 Hours										

FLIGHT ITINERARY INFORMATION

Last Departure Point Airport ID: <u>157</u> City: <u>Toughkenamon</u> State: <u>PA</u> Country: <u>USA</u>	Time of Departure Time: <u>4:06 PM</u> Time Zone: <u>Eastern</u>	Destination Airport ID: <u>OPH</u> City: <u>West Chester</u> State: <u>PA</u> Country: <u>USA</u>	Type Flight Plan Filed ☒ None ☐ Company VFR ☐ Military VFR ☐ VFR ☐ VFR/IFR ☐ IFR ☐ Unknown Activated? ☐ Yes ☐ No ☐ Unknown
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Type of ATC Clearance/Service (Check all that apply) ☒ None ☐ VFR ☐ Special VFR ☐ IFR ☐ Special IFR ☐ VFR On Top ☐ VFR Flight Following ☐ Traffic Advisory ☐ Cruise ☐ Unknown / NA			
Airspace where the accident/incident occurred (Check all that apply) ☐ Class A ☐ Class B ☐ Class C ☐ Class D ☒ Class E ☐ Class G ☐ Demo Area ☐ Warning Area ☐ Prohibited Area ☐ Restricted Area ☐ Military Operations Area (MOA) ☐ Airport Advisory Area ☐ Jet Training Area ☐ TRSA ☐ FAR 93 ☐ Special ☐ Air Traffic Control Area ☐ Unknown			Altitude of In-Flight Occurrence: _____ ft msl

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE

Source of Pilot Weather Information (Check all that apply) ☐ National Weather Service ☐ Flight Service Station ☐ TV/Radio ☐ Automated Report ☐ Commercial Weather Service (DUATS) ☐ On-Board Weather ☐ Company ☐ Military ☒ Internet ☐ None ☐ Unknown	Weather Observation Facility Facility ID: _____ Observation Time: _____ Time Zone: _____ Distance from Accident Site: _____ nm Direction from Accident Site: _____ degrees true
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Basic Conditions ☒ VMC ☐ IMC ☐ Unknown	Light Condition ☐ Dawn ☒ Day ☐ Dusk ☐ Night ☐ Dark Night ☐ Bright Night ☐ Unknown
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Sky/Lowest Cloud Condition ☐ Clear ☒ Few ☐ Partial Obscuration ☐ Scattered ☐ Thin Broken ☐ Thin Overcast ☐ Unknown Lowest Cloud Condition Height _____ ft agl	Ceiling ☐ None (Clear) ☒ Broken ☐ Overcast ☐ Obscured ☐ Indefinite ☐ Unknown Ceiling Height _____ ft agl	Temperature: _____ (C) or <u>76</u> (F) Dew Point: _____ (C) or <u>65</u> (F) Altimeter Setting: _____ in. Hg or _____ MB
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Wind Direction ☐ Variable - or - Direction: <u>E</u> degrees true	Wind Speed ☐ Calm ☒ Light and Variable - or - Speed: _____ kts	Wind Gusts ☐ Not Gusting - or - Speed: <u>10-12</u> kts	Visibility <u>10</u> miles RVR: _____ feet RVV: _____ miles Density Altitude: _____ ft
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Intensity of Precipitation ☐ Light ☐ Moderate ☐ Heavy ☐ N/A ☐ Unknown	Type of Precipitation (Check all that apply) ☒ None ☐ Rain ☐ Snow ☐ Hail ☐ Rain Showers ☐ Drizzle ☐ Ice Pellets ☐ Snow Pellets ☐ Snow Grains ☐ Ice Crystals ☐ Freezing Rain ☐ Snow Shower ☐ Ice Pellets Shower ☐ Freezing Drizzle	Restriction to Visibility (Check all that apply) ☒ None ☐ Blowing Dust ☐ Blowing Sand ☐ Blowing Snow ☐ Blowing Spray ☐ Dust ☐ Fog ☐ Ground Fog ☐ Haze ☐ Ice Fog ☐ Smoke ☐ Unknown
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Icing Forecast Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown	Icing Actual Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown	Turbulence Type (Check all that apply) ☐ None ☒ Clear Air ☐ Terrain-Induced ☐ Convective Turbulence Severity ☐ Light ☐ Moderate ☐ Severe ☐ Extreme
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NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident:

DAMAGE TO AIRCRAFT AND OTHER PROPERTY**Aircraft Damage**

- ☐ None ☐ Substantial
☒ Minor ☐ Destroyed
 ☐ Unknown

Aircraft Fire

- ☒ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Fire at Unknown Time
☐ On-Ground ☐ Unknown

Aircraft Explosion

- ☒ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Explosion at Unknown Time
☐ On-Ground ☐ Unknown

Description of Damage to Aircraft and Other Property (Use additional sheet if necessary)

I landing skid collapsed + tail had some damage to blades + skin

NARRATIVE HISTORY OF FLIGHT (Please type or print in ink)

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State departure time and and location, services obtained, and intended destination. Provide as much detail as possible.

I Took off at 1157 - Flew 6 miles toward West Chester PA -
Decided to return for additional fuel - was on short
final at low altitude - noticed ~~low~~ main rotors
had lost RPMs - attempted to increase rpm's in
vain - after that everything happened so fast I cant
remember ~~what~~ ~~happened~~ much

RECOMMENDATION (How could this accident/incident have been prevented?)

Operator/Owner Safety Recommendation

watching instruments more carefully.

MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on separate sheet)Was there Mechanical Malfunction/Failure? ☐ Yes ☐ No

(If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)

Don't know yet

Total Time/Cycles
On Part

____ Hours

____ Cycles

Time Since This Part
Inspected/Overhauled

____ Hours

FUEL & SERVICES INFORMATION

Fuel on Board at Last Takeoff

(Convert from pounds, as necessary)

20 gals.

Gallons

Fuel Type

☐ 80/87☒ 100 Low Lead☐ 100/130☐ 115/145☐ Jet A☐ Jet A-1☐ Jet B☐ JP8☐ Automotive☐ Other, specify _____

Other Services, if Any, Prior to Departure

EVACUATION OF AIRCRAFTWas an emergency evacuation of the aircraft performed? ☐ Yes ☒ No

Method of Exit - Describe how the occupants exited and how many occupants evacuated each location

Climbed out pilot door

OTHER AIRCRAFT - COLLISION (If air or ground collision occurred, complete this section for other aircraft)

Aircraft Registration Number

Manufacturer: _____

Model: _____

Damage to Other Aircraft

☐ Destroyed☐ Minor☐ Substantial☐ None

Registered Owner of Other Aircraft

Name: _____

City: _____

State: _____ ZIP: _____

Country: _____

Pilot of Other Aircraft

Name: _____

City: _____

State: _____ ZIP: _____

Country: _____

ADDITIONAL INFORMATION (Please type or print in ink)

Use this space if additional space is needed for any answers.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Date of this Report

09/28/2021
mm/dd/yyyy

Name of Pilot/Operator:

Henry W. Marshall

Signature:

-- or --

☐ Check here to electronically sign this document**If a Person Other than Pilot/Operator is Filing Report**

Name:

Title:

Signature:

-- or --

☐ Check here to electronically sign this document**FOR NTSB USE ONLY**NTSB Accident/Incident No.
ERA21LA357Reviewed by NTSB Regional Office
ERAName of Investigator
Gretz

Date Report Received

10/1/21