Title: Active Infrared Sensor
Objective: Verify device is installed using acceptable standards and practices, communicates properly with the IDS, and provides proper protection of assets and meets or exceeds the contract performance specification.
Applicability: Active Infrared Sensors, Photoelectric Sensors. Example: Covering doors, windows and other openings.
Notes: 1. Real-time voice communications between the workstation operator and the field technician is required. 2. The field technician may need tools and a stepladder to perform the sensor tamper test. 3. Perform the intrusion test with the associated zone in the SECURE state. 4. Enable sensor motion test lights for conducting these tests. Deactivate after testing is completed. 5. Line Supervision, Power Fail, and Tamper Tests (tamper test each cover on the beam tower/array) need to be performed in addition to these procedures.

Steps	Actions	Expected Results
1.0	**Intrusion Test**	
1.1	Stand outside of the detection beams and ensure that the detection path is clear.	No alarms are received at the workstation.
1.2	Attempt to pass through the detection area.	An intrusion alarm is received at the workstation.
1.3	Stand clear of the detection area.	
1.4	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
2.0	**Beam Test**	
2.1	Block only one beam on the sensor tower/array.	An intrusion alarm is received at the workstation.
2.2	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
2.3	Repeat for each individual beam on the sensor tower/array.	

Title: Balanced Magnetic Switch (BMS)		
Objective: Verify device is installed using acceptable standards and practices, communicates properly with the workstation, and provides proper protection of assets and meets or exceeds the contract performance specification.		
Applicability: Examples: Doors, gates, hatches, and operable windows.		
Notes: 1. Real-time voice communications between the workstation operator and the field technician is required. 2. The field technician may need tools and a stepladder to perform the BMS tamper tests. 3. Perform the nuisance test and intrusion test with the associated zone in the SECURE state. 4. Line Supervision, Power Fail, and Tamper Tests need to be performed in addition to these procedures.		

Steps	Actions	Expected Results
1.0	**Nuisance Test**	
1.1	Rattle or shake the door to simulate normal vibrations that might be induced by wind or other non-intrusion factors.	No alarm is received at the workstation.
2.0	**Intrusion Test**	**(It is recommended to repeat this test at least 3 times with no failures to help ensure proper functionality)**
2.1	Gradually open the door until an alarm occurs. (This assumes that the door alarm is not programmed with an entry delay.)	An intrusion alarm is received at the workstation when greater than ¼ inch movement of the magnet in relation to the switch housing.
2.2	Close the door.	
2.3	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.

Title: Beam Break Sensor	

Objective: Verify device is installed using acceptable standards and practices, communicates properly with the IDS, and provides proper protection of assets and meets or exceeds the contract performance specification.

Applicability: Active Infrared Sensors, Photoelectric Sensors.

Notes:
1. Real-time voice communications between the workstation operator and the field technician is required.
2. Make penetration attempts using methods and locations that minimize the chance of detection.
3. The field technician may need tools and a stepladder to perform the sensor tamper test.
4. Perform the intrusion test with the associated zone in the SECURE state.
5. Enable sensor motion test lights for conducting these tests. Deactivate after testing is completed.
6. Line Supervision, Power Fail, and Tamper Tests (tamper test each cover on the beam tower/array) need to be performed in addition to these procedures.

Steps	Actions	Expected Results
1.0	**Intrusion Test – Beam Cross**	
1.1	Stand outside of the detection beams and ensure that the detection path is clear.	No alarms are received at the workstation.
1.2	Attempt to pass through the detection area.	An intrusion alarm is received at the workstation.
1.3	Stand clear of the sensor detection pattern.	
1.4	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
2.0	**Beam Test**	
2.1	Block only one beam on the sensor tower/array.	An intrusion alarm is received at the workstation.
2.2	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
2.3	Repeat for each individual beam on the sensor tower/array.	
3.0	**Intrusion Test – Post Climb**	
3.1	Stand outside of the detection beams and ensure that the detection path is clear.	No alarms are received at the workstation.
3.2	Attempt to climb the post (do not climb over the top).	An intrusion alarm is received at the workstation.
3.4	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.

	Title: Passive Infrared Sensor – Curtain Type

Objective: Verify device is installed using acceptable standards and practices, communicates properly with the IDS, and provides proper protection of assets and meets or exceeds the contract performance specification.

Applicability: Curtain Passive Infrared Sensors

Notes:
1. Real-time voice communications between the workstation operator and the field technician is required.
2. The field technician may need tools and a stepladder to perform the sensor tamper test.
3. Perform intrusion tests with a human target. All observers are to remain still and clear of the detection zone to avoid triggering the alarm and creating invalid results.
4. Prior to the start of testing, mark five intrusion lanes (or points of intrusion taking into account the sensor coverage area), with each lane probing a different portion of the sensor detection pattern. Test each intrusion lane.
5. Perform the intrusion test with the associated zone in the SECURE state.
6. Line Supervision, Power Fail, and Tamper Tests need to be performed in addition to these procedures.

Steps	Actions	Expected Results
1.0	**Intrusion Test**	
1.1	Stand at the beginning of the intrusion lane and remain motionless for 20 seconds.	No alarms are received at the workstation.
1.2	Step into intrusion lane.	An intrusion alarm is received at the workstation.
1.3	Move out of the sensor detection pattern.	
1.4	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
1.5	Repeat for all lanes (note # 4).	

Title: Dual Technology Sensor
Objective: Verify device is installed using acceptable standards and practices, communicates properly with the IDS, and provides proper protection of assets and meets or exceeds the contract performance specification.
Applicability: Dual technology sensors (microwave and passive infrared)

Notes:
   1. Real-time voice communications between the workstation operator and the field technician is required.
   2. The field technician may need tools and a stepladder to perform the sensor tamper test.
   3. Perform intrusion tests with a human target. All observers are to remain still and clear of the detection zone to avoid triggering the alarm and creating invalid results.
   4. Prior to the start of testing, mark five intrusion lanes (or points of intrusion taking into account the sensor coverage area), with each lane probing a different portion of the sensor detection pattern. Test each intrusion lane.
   5. Perform the intrusion with the associated zone in the SECURE state.
   6. If multiple sensors are used to protect an alarmed zone, disable all sensors except the unit being tested. Restore all sensors to normal operation following the completion of testing.
   7. If equipped, enabling sensor motion test light is useful for conducting these tests. Deactivate after testing is completed.
   8. Line Supervision, Power Fail, and Tamper Tests need to be performed in addition to these procedures.

Steps	Actions	Expected Results
1.0	**Intrusion Test**	
1.1	Stand at the beginning of the intrusion lane and remain motionless for 20 seconds or until test light turns off.	No alarms are received at the workstation.
1.2	Take four steps at a normal walking pace along the intrusion lane and stop.	An intrusion alarm is received at the workstation.
1.3	Move out of the sensor detection pattern.	
1.4	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
1.5	Repeat for all lanes (note # 4).	

	Title: Fence Sensor

	Objective: Verify device is installed using acceptable standards and practices, communicates properly with the ACS, and provides proper protection of assets and meets or exceeds the contract performance specification.

	Applicability: Fiber optic sensing cable, fence mounted vibration sensors, strain sensitive cable sensors.

Notes:
1. Real-time voice communications between the workstation operator and the field technician is required.
2. The field technician will need a screwdriver, protective equipment and a stepladder to perform the fence sensor test.
3. Make penetration attempts using methods and locations that minimize the chance of detection.
4. Simulated cut test will use a screwdriver to tap on the fence fabric. Ensure the number of taps exceeds the event count calibration value.
5. Apply a similar force to that needed to cut the fence fabric for each simulated cut test tap.
6. If sensing cable is in the outrigger, the simulated Cut test needs to be performed on the outrigger also.
7. Do not climb over the fence or into the outrigger.
8. Establish number of tests and test locations per the requirements.
9. Line Supervision, Power Fail, and Tamper Tests need to be performed in addition to these procedures.

Steps	Actions	Expected Results
1.0	**Intrusion Test – Simulated Cut**	
1.1	Intruder will position themselves at the section of fence to be tested.	No alarms are received at the workstation.
1.2	Tap the screwdriver at different locations on the fence panel and vertical outrigger at approximately one-second intervals.	An intrusion alarm is received at the workstation.
1.3	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
2.0	**Intrusion Test – General**	
2.1	Intruder will position themselves at the section of fence to be tested.	No alarms are received at the workstation.
2.2	Grab and firmly shake the fence fabric to attempt to set off an alarm.	An intrusion alarm is received at the workstation.
2.3	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
3.0	**Intrusion Test – Fence Climb**	
3.1	Intruder will position themselves at the section of fence to be climbed.	No alarms are received at the workstation.
3.2	Intruder will begin to climb the fence.	An intrusion alarm is received at the workstation.
3.3	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
4.0	**Nuisance Test**	
4.1	Intruder will position themselves at the section of	No alarms are received at the workstation.

Steps	Actions	Expected Results
	fence to be tested.	
4.2	Grab and rattle the fence to simulate wind on the fence.	No intrusion alarms are received at the workstation.

Title: Glass Break Sensor - Acoustic Type	

Objective: Verify device is installed using acceptable standards and practices, communicates properly with the IDS, and provides proper protection of assets and meets or exceeds the contract performance specification.

Applicability: Glass Break Sensors (Acoustic Type)

Notes:
1. Real-time voice communications between the workstation operator and the field technician is required.
2. The field technician will need a Glass Breakage Tester unit (and potentially a stepladder and other tools) to perform the tests.
3. Perform all tests with the associated zone in the ACCESS state.
4. If multiple sensors are used to protect an alarmed zone, disable all sensors except the unit being tested. Restore all sensors to normal operation following the completion of testing.
5. Line Supervision, Power Fail, and Tamper Tests need to be performed in addition to these procedures.

Steps	Actions	Expected Results
1.0	**Intrusion Test**	
1.1	Position testing unit on the glass pane furthest away from the sensor but at a distance no greater than the sensors range published by the manufacturer. Activate the testing unit.	An intrusion alarm is received at the workstation. If equipped, a visual alarm (light) will be displayed. After completion of test and prior to performing additional tests, verify that the visual alarm is reset.
1.2	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
1.3	Repeat for each of the corners of the covered glass farthest from the center of the coverage zone.	

Title: Glass Break Sensor - Contact Type
Objective: Verify device is installed using acceptable standards and practices, communicates properly with the IDS, and provides proper protection of assets and meets or exceeds the contract performance specification.
Applicability: Glass Break Sensors (Contact Type)
Notes: 1. Real-time voice communications between the workstation operator and the field technician is required.   2. The field technician may need tools and a stepladder to perform the test.   3. Conduct the intrusion test with a lightweight tool such as the plastic handle of a screwdriver.   4. Perform all tests with the associated zone in the ACCESS state.   5. If multiple sensors are used to protect an alarmed zone, disable all sensors except the unit being tested. Restore all sensors to normal operation following the completion of testing.   6. Line Supervision, Power Fail, and Tamper Tests need to be performed in addition to these procedures.

Steps	Actions	Expected Results
1.0	**Intrusion Test**	
1.1	Lightly rap the glass in the corner farthest from the sensor.	An intrusion alarm is received at the workstation.
1.2	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.

Title: Interior Volumetric Sensor
Objective: Verify device is installed using acceptable standards and practices, communicates properly with the IDS, and provides proper protection of assets and meets or exceeds the contract performance specification.
Applicability: Passive infrared, microwave, and dual technology sensors
Notes: 1. Real-time voice communications between the workstation operator and the field technician is required.   2. The field technician may need tools and a stepladder to perform the sensor tamper test.   3. Perform intrusion tests with a human target. All observers are to remain still and clear of the detection zone to avoid triggering the alarm and creating invalid results.   4. Prior to the start of testing, mark five intrusion lanes (or points of intrusion taking into account the sensor coverage area), with each lane probing a different portion of the sensor detection pattern. Test each intrusion lane.   5. Perform the intrusion test with the associated zone in the SECURE state.   6. If multiple sensors are used to protect an alarmed zone, disable all sensors except the unit being tested. Restore all sensors to normal operation following the completion of testing.   7. If equipped, enabling sensor motion test light is useful for conducting these tests. Deactivate after testing is completed.   8. Line Supervision, Power Fail, and Tamper Tests need to be performed in addition to these procedures.

Steps	Actions	Expected Results
1.0	**Intrusion Test**	
1.1	Stand at the beginning of the intrusion lane and remain motionless for 20 seconds or until test light turns off.	No alarms are received at the workstation.
1.2	Take four steps at a normal walking pace along the intrusion lane and stop.	An intrusion alarm is received at the workstation.
1.3	Move out of the sensor detection pattern.	
1.4	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
1.5	Repeat for all lanes (note # 4).	

	Title: Microwave Sensors

Objective: Verify device is installed using acceptable standards and practices, communicates properly with the IDS, and provides proper protection of assets and meets or exceeds the contract performance specification.

Applicability: Bi-static microwave and mono-static microwave

Notes:
1. Real-time voice communications between the workstation operator and the field technician is required.
2. Make penetration attempts using methods and locations that minimize the chance of detection.
3. It is acceptable to use calibrated substitutes for a human intruder. For example, a 12-inch (30 cm) diameter aluminum sphere pulled at grade across the detection zone may be permissible.
4. Instruct all observers to stand away from the coverage zone in order to avoid triggering an alarm and creating invalid results.
5. Perform the walk test at a normal pace. Allow practice runs for the run-and-jump test in order to approximate the location of the zone to better time the jump to clear the zone. Conduct the crawl test at a slow, steadily paced crawl. If applicable at a vehicle gate, perform the intrusion test using a vehicle. Vary test speed in the range of 0.2 to 25 feet/second.
6. Perform intrusion tests approximately every 10 feet or less depending on the zone length.
7. Perform the Intrusion Tests with the associated zone in the SECURE state.
8. Line Supervision, Power Fail, and Tamper Tests need to be performed in addition to these procedures.
9. Perform the tamper test on all transmitters, receivers, and field distribution boxes.
10. If equipped, enabling sensor motion test lights or tones is useful for conducting these tests. Deactivate after testing is completed.

Steps	Actions	Expected Results
1.0	**Intrusion Test – Walking, Run-and-Jump, Crawling, Vehicle**	
1.1	Stand outside of the coverage zone.	No alarms are received at the workstation.
1.2	Cross the coverage zone.	An intrusion alarm is received at the workstation.
1.3	Stop outside of the coverage zone.	
1.4	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
1.5	Repeat for each entry method along the coverage zone.	

Title: Buried Ported Coax Sensors	

Objective: Verify device is installed using acceptable standards and practices, communicates properly with the IDS, and provides proper protection of assets and meets or exceeds the contract performance specification.

Applicability: Perimeters

Notes:
1. Real-time voice communications between the workstation operator and the field technician is required.
2. The sensor may be equipped with an integral test indicator. If present, verify that the test indicator is operable and visible during the test.
3. Instruct all observers to stand away from the coverage zone in order to avoid triggering the alarm and creating invalid results.
4. Make penetration attempts using methods and locations that minimize the chance of detection. Areas of note are beginning and ending of cable runs, crossovers, transitions to different ground medium, areas after sharp bends in the cable paths, and locations in close proximity to fencing and other metal objects.
5. Make intrusion attempts across the sensor cable at approximately 10-foot intervals. Adjust this interval at the termination points of the two sensor cable pairs.
6. Vary test speed in the range of 0.2 to 25 feet/second.
7. Allow practice runs for the run-and-jump test to approximate the location of the zone to better time the jump to clear the zone.
8. Perform the intrusion tests with the associated zone in the SECURE state.
9. Line Supervision, Power Fail, and Tamper Tests need to be performed in addition to these procedures.

Steps	Actions	Expected Results
1.0	**Intrusion Test – Walking and Run-and-Jump**	
1.1	Stand outside of the coverage zone.	No alarms are received at the workstation.
1.2	Cross the coverage zone.	An intrusion alarm is received at the workstation.
1.3	Stop outside of the coverage zone.	
1.4	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
1.5	Repeat for each testing method.	
2.0	**Remote Test**	
2.1	Verify that there are no active alarms along the sensor path.	
2.2	Activate the remote test.	Alarm received at the workstation.
2.3	Clear the alarm at the workstation.	The active alarm queue is empty.

Title: Taut Wire Sensor

Objective: Verify device is installed using acceptable standards and practices, communicates properly with the IDS, and provides proper protection of assets and meets or exceeds the contract performance specification.

Applicability: Fences, perimeters.

Notes:
1. Real-time voice communications between the workstation operator and the field technician is required.
2. The field technician may need tools, protective equipment, and a stepladder to perform the sensor tamper test.
3. When conducting the deflection test, do not pull wires beyond a 2 inch deflection. This is to avoid damaging the system.
4. Make penetration attempts using methods and locations that minimize the chance of detection.
5. Conduct tests for each wire at the point farthest from the sensor posts.
6. Conduct the tamper test for field distribution boxes, sensor posts, and sensor post junction boxes (if used).

Steps	Actions	Expected Results
1.0	**Intrusion Test – Deflection Test**	
1.1	Attach a measurement tool (like a yardstick) behind the wire to be tested.	No alarms are received at the workstation.
1.2	Slowly pull the wire down and measure the vertical deflection required to trigger an alarm. (See note 3.)	An intrusion alarm is received at the workstation.
1.3	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.
1.4	Repeat for each wire.	

Title: Vibration Sensor	

Objective: Verify system is installed using acceptable standards and practices, communicates properly, and provides proper protection of assets and meets or exceeds the contract performance specification.

Applicability: Vibration Sensors. Example: covering vaults and arms rooms.

Notes:
1. Real-time voice communications between the workstation operator and the field technician is required.
2. The field technician may need tools and a stepladder to perform the sensor tamper test.
3. Take care so as not to damage any surfaces while conducting this test.
4. Test may require multiple impacts to trigger sensor depending on the sensor configuration.
5. Perform the intrusion tests with the associated zone in the SECURE state.
6. If multiple sensors are used to protect an alarmed zone, disable all sensors except the unit being tested. Restore all sensors to normal operation following the completion of testing.
7. Line Supervision, Power Fail, and Tamper Tests need to be performed in addition to these procedures.

Steps	Actions	Expected Results
1.0	**Intrusion Test**	
1.1	Stand still near the sensor.	No alarms are received at the workstation.
1.2	Create a vibration. Example: strike the wall with a rubber mallet at different locations within the manufacturer's rated coverage area.	An intrusion alarm is received at the workstation.
1.3	Clear the intrusion alarm at the workstation.	The active alarm queue is empty.