PROTOCOLS FOR CONTACT WITH EXTRATERRESTRIALS

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Currently Under Review

The development of any first contact protocol, whether with a newly discovered indigenous people, an unknown entity, new wildlife species, or extraterrestrial will always be rife with unknowns. Therefore, caution and safety should always be the first course of action.

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INTRODUCTION

A rosetta stone would make communication between species fairly easy to interpret and convey, but in the absence of a rosetta stone, a simple system of communication must be devised.

This protocol seeks to develop an ongoing evolution of criteria, techniques, and methodologies for contact with Extraterrestrials. This protocol will provide simple rules of encounter currently used and build on these rules as information unfolds.

The first premise we must understand is that the purpose of any communication is to convey an idea between one individual and another, whose thinking processes may be entirely different than our own. Therefore, the basic assumptions of communication should not be formed around any one language that could not be considered universal or readily understood. Rather the communication of idea is better served through symbols, numbers, pictographs, or signing.

Communication must be specifically designed to convey meaning that can be readily understood and easily comprehended on a variety of intellectual levels. This is about cleverness on the part of the idea conveyor, rather than the ingenuity of the recipient. This approach means conveying a large amount of information with a minimum amount of material.
Therefore, these Protocols are not just “manners” or “rules” – they are a representation of an ethical system.

WHY DO WE WANT CONTACT

As the human species, we are clear about the effects of our environments upon our cultural and historical development. The addition of other influences is always present, creating and endless stream of potentials and opportunities for change. With the advent of contact with Extraterrestrial species, the potentials for intelligent influences or misunderstood influences is very relevant.

If we wish to sustain a healthy and thriving humanity upon Planet Earth, then we need to acknowledge the new paradigms unfolding before us. By its very nature, these new paradigms require researchers and science to make assumptions about the acculturation of an Extraterrestrial Species into our world’s health, politics, religions, philosophies, collaborations, competing factors, as well as, social and cultural aspects.
We must learn to communicate.

What is a First Contact Protocol

First contact is the first meeting of two communities, species, or civilizations previously without contact with one another. First Contact Protocol is just a fancy name for the standard of

information exchange between two cultures. It affords us the ability to make a judgment, an assertion, or a denial in terms of social interaction.
First Contact Protocol allows one to assess, to make judgments about, and the prudence of social interaction between two distinct civilizations.

History

There many things to consider with regards to first contact. Such contact is sometimes described as a "discovery", such as the British and United States did by creating the legal theory of the "Doctrine of Discovery". It is generally the more technologically complex society that is able to travel to new geographic regions to make contact with those more isolated, less technologically developed societies.

The fascination with first contact has gone through many transformations since the Age of Discovery, one of the earliest narratives being about contacting the Ten Lost Tribes, and continues today as an expression in science fiction about extraterrestrial first contact, as well as being manifest in contemporary space exploration.

Historical records indicate that when one culture is significantly more technologically advanced than the other, this side will be favored by the disruptive nature of conflict, often with dire consequences for the other society, but the introduction of disease plays a critical role in the process.

More-isolated peoples who lived across broader territories in low-density succumbed to the illnesses brought from the comparatively-higher density of Europe. The Indigenous populations simply had not had the time to develop immunity to the foreign diseases, all of which introduced at once, to which the more urbanized European populations had had many years to develop some population immunity.

Our own history tells us to be conscientious and cautious about First Contact.

The Three Scenarios for First Contact

1. Detection -> This is a qualitative scenario wherein one or more of our projects detect an alien civilization with definitive proof that they are there and intelligible. What this means is that through some means we have detected either signals or significant construction in a far stellar systems that we can say definitively are artificial constructs that convey some organization and/or meaning. Think early radio and TV signals from our own planet that could be deciphered and viewed much as we humans do. Or some construct that is clearly artificial, like a satellite or space ship. This type of contact will change our view of both ourselves and the universe at large. It would prove without a

doubt that we are not (or at least were not) alone in the universe and that other intelligences do in fact exist beyond our own. It would upset many religious groups and perhaps alter forever our own efforts on space matters. Exact repercussions beyond that would depend on how close they are, levels of technology and of course whether we can figure out if they are currently active or extinct.

2. Communication -> This scenario is less likely than the above. Mostly due to time and distance (which are the same thing on the galactic scale). In this instance we would receive, one or more communications that would appear to be aimed at us. Understand that we ourselves are barely at the level where we can reliably detect planets in other stellar systems. WE have yet to get to the point where we could send a targeted communique to said planet with any hope of our signal not being camouflaged by cosmic radiation. A communication targeted at us, in a form expected to be understood, across the vast distances and time involved, would demonstrate technologies far in advance of ours, in that they can "see" us and determine enough about us to be able to target us for discourse in a manner they anticipate that we could understand. All by itself, this level of technology would most likely spark quite a bit of fear in both governments and the general populace. Excitement too, but fear since it would be obvious that such a race knows far more about us than we of them. Then of course, what was contained in said message could raise concerns to higher levels. Although, in fairness, the message could be simply "hi, you are not alone". But look to see much gnashing of teeth and worry among the general populace.
3. A visit. This is the obvious scenario and the one with the most angst. This would be the most disruptive regardless of the purpose of the visit. There really are only two choices for the visit, wary friendliness or hostility. The first could be the greatest thing since the invention of the wheel. Though there is risk too of gaining knowledge and technologies beyond our level that could profoundly change our society for the worse. The latter scenario, of course, given the obvious disparity in ability and technology would most likely mean the end of our civilization as we know it… probably permanently. Either would cause a great deal of panic, possibly causing geopolitical shifts that would change our civilization in ways that are hard to quantify.

What is a mind? What is its purpose? How does it process information?

Despite all the recent advances in the cognitive and neurosciences, there's still much about the human brain that we do not know. We still don't understand how the brain produces phenomenal experiences or qualia. Neuroscientists cannot explain how incoming sensations get routed, such that they can be translated into subjective impressions like taste, color, or pain.

Like a computer's hard drive, memories are physically recorded in our brains. But we have no idea how our brains do this, nor do we know how this information gets oriented in the brain.
This information is important because it determines if a species is either sapient or savage. A mind is one of a group of life support systems of a life form. As such it has a well-defined, biologically determined job to perform and well-defined, biologically determined means of doing that job.

A mind is designed, by biological fact, for predictive behavior in order to maintain a single relative difference, life. That, which we call judgment. One should then see an identity between First Contact Protocol and evaluation of a species in terms of biological evolution, in terms of prioritizing or regulating information.

A First Contact Protocol is a means of determining a species functional psychology, how a life form prioritizes or regulates their own behavior. It is a means of using a biological standard for intelligence as a means of measuring a species behavior so as to determine the testers behavioral response in terms of the answers that standard determines. In other words First Contact Protocol is established on objective standards. Not a standard in favor of either species, a standard as establish by physical fact.

A biological standard is established by the definition of a mind itself. It provides the objective standard by which to measure the psychology of any mind, of any species, anywhere in the universe. Language is an intelligible and universal, grammars are perceptible and particular. Thus if a species does not comprehend the universal, it can be tested using any particular grammar. It is one of the most objective tests possible. As a mind is one of a group of life support systems of a biological specimen, it does not take much to see that objectively it is designed to maintain and promote life. There is no life support system even possible which a priori determines its functional standard or purpose. Not even a mind. It is not designed to do as we please, it is designed prior to even recognizing the word for a purpose. Being a life support system aimed at predictive behavior, means that it functions wholly through the symbolic processing of information.

This means that a species has to be aware that language processing for predictive behavior is a biological given. This is what is meant by psychology is behavior effected through the symbolic processing of information. Psychology, is a name used to denote a biologically established standard for information processing by which a life form performs it biologically determined job of effecting predictive behavior which maintains and promotes life. A mind is designed to process all information, and thus maintain and promote all life. It is also known as a standard for self-awareness. By that one standard, spotting an idiot tossing words around is often rather simple. How one behaves is the standard by which they measure themselves against their environment. An identity is expressed, you will do unto others as you do to yourself.

First Contact

It is best to begin with a set of rules for a human to Extraterrestrial encounter based on the assumption that there has been no effective communication prior to or during the encounter. The main question is how do you approach a totally unknown entity in such a way as to not provoke a hostile reaction? At that point, nothing can be taken for granted and substantial on-the-spot sound judgement will be required.

To begin with, there is an unwritten intent to minimize potential misunderstandings that could lead to violence. It is difficult enough to minimize misunderstanding and escalation within our own species, it would be significantly more difficult to do the same when civilizations from different Extraterrestrial species meet. This point is critical for our purposes.

INCIDENT INVESTIGATIONS

Incident investigation is a process for reporting, tracking, and investigating incidents that includes (1) a formal process for investigating incidents, including staffing, performing, documenting, and tracking investigations of process safety incidents and (2) the trending of incident and incident investigation data to identify recurring incidents. This process also manages the resolution and documentation of recommendations generated by the investigations.

Incident investigation is a way of learning from incidents that occur and communicating the lessons learned to both internal personnel and other stakeholders. Depending upon the depth of the analysis, this feedback can apply to the specific incident under investigation or a group of incidents sharing similar patterning and sequences.

A multidisciplinary team is appropriate for incident investigations with greater consequences and risks. An individual or a two-person investigation team may investigate incidents with lower consequences and risks. Personnel throughout Omicron provide assistance to the investigation team.

Incident investigations are conducted at the location where the incident has occurred because remote investigations are rarely effective. Make sure to conduct them as soon as possible after it has happened so that any evidence that would help you find the patterning and sequencing and act on it is not lost. The investigation team should head to the incident scene so that they can collect data that would help them with their work quickly and effectively.

SAFETY AND CARE GUIDELINES

This Universe is filled with unknowns, so this fact should always be the foundation of any encounter. We literally, only know, what we know to understand. Having stated this fact, every individual must understand that an encounter will always accompany many unknowns.

Safety measures are important for several reasons. It is a given that personal safety is always at the forefront of an individual's mindset. It's inherently built into our survival mode. What is not built into that premise, is the means or concepts of the scope of safety required. However, in this instance safety is important for a number of reasons.

1. Safety provides measures to prevent accidents and injuries
2. Safety provides measures to protect the environment
3. Safety provides measures to prevent impacts to the economy
4. Safety provides measures to prevent unwarranted contact and exposure to hazardous materials and substances
5. Safety provides measures to prevent unnecessary contact with diseases and infections

Safety isn't just about the mental, physical, and psychological well-being of an individual. Safety protocols are a means to prevent or minimize danger, risk, and injury.
We live in a world where the chances of an Extraterrestrial encounter are very real. Therefore, it necessitates a series of safety guidelines to mitigate any dangers, risks, or injuries from contact.

GENERAL CONTACT GUIDELINES

Do not startle Extraterrestrials

When you first encounter an Extraterrestrial, you should remain calm and not startle it. Screaming, running, or acts of aggression can cause the Extraterrestrial to go into defensive mode because they perceive you to be a threat. Chasing and/or evading can both be considered offensive tactics. Better to stand at a distance and be peaceful, not perceived as a threat.

Start backing away slowly and make slow intended hand gestures of assurance

Back away slowly from the Extraterrestrial to give the appearance of creating "safe space" while making slow, intended, big hand motions of assurance that intend no harm. If you are with a group of people, it's important to stay together, ensuring not to make any sudden or unexpected moves.

Make human noises

Make the Extraterrestrial aware that you are a human by speaking slowly and calmly. The best way to do this is to start talking in a calm voice using short general sentences such as "Everything is fine" or "I mean no harm".

Make sure to give the Extraterrestrial space to leave

Don't make the Extraterrestrial feel trapped during the encounter. Ensure you give them space to leave. This will help them to not perceive you as a threat. Sometimes providing space can be hard because you may be in a place where you are naturally trapped due to things such as buildings, trees, rivers or rocks. But try your best to guide yourself and others away to provide space for the Extraterrestrial so no threat is perceived. This maneuver provides you and the Extraterrestrial with a modicum of control over the situation.

SAFETY GUIDELINES

Let's begin by talking about radiation.

Radiation is found everywhere. Everyday objects such as personal electronics emit low amounts of radiation. The types of radiation can be electromagnetic, radio waves or other generally non-harmful radiation energy. Electronics such as cell phones, microwave, and radio will not harm a person who uses them regularly. Some devices need extra precautions such as the medical equipment, x-ray and CT scan. Any metal object should be removed before operating the machine because it can interfere with the electromagnetic field and obscure the view of the specific anatomy.

SPACE RADIATION MATTERS

Space radiation is different from the kinds of radiation we experience here on Earth. Space radiation is comprised of atoms in which electrons have been stripped away as the atom accelerated in interstellar space to speeds approaching the speed of light – eventually, only the nucleus of the atom remains.

Space radiation is made up of three kinds of radiation: particles trapped in the Earth's magnetic field; particles shot into space during solar flares (solar particle events); and galactic cosmic rays, which are high-energy protons and heavy ions from outside our solar system. All of these kinds of space radiation represent ionizing radiation.

From this information we can conclude, that depending on where a spacecraft has traveled in interstellar space, it will surely pick up some form of radiation particles. Precautions should always be practiced.

The ALARA (as low as reasonably achievable) radiation safety principle is to minimize radiation dosage and control the amount of radioactive materials in the environment to ensure your safety. Radiation exposure risks can be lowered by following the three principles of radiation safety which is time, distance, and shielding. These are also known as the basic protective measures in radiation safety.

Time

This refers to the amount of time spent near the radioactive source. Time near the radioactive source should be kept at a minimum. Tasks or work activities revolving around the radioactive source should be done quickly as possible, to reduce spending time around the radioactive area more than necessary.

Distance

This refers to the distance between a person and the radioactive source. The greater the distance the lesser exposure and dose of radiation workers will be exposed to.

Shielding

Exposure to radiation sources can be minimized through shields. Shielding refers to putting something in between the radiation source and the person involved. The effectiveness of shields will vary depending on the level of radionuclides the radiation source is emitting.

Radiation Safety is a combination of safe practices and precautionary measures for working with or near radiation. Radiation safety measures for conducting spacecraft investigations help ensure that critical radiation safety precautions are in place to reduce the risk of overexposure. There should be visible warning signs, contamination surveys conducted, and device tests for all radiation-producing equipment. All investigators must be trained to limit time of exposure, use radiation shields, and increase the distance of contact with radioactive devices and materials.

Everyone must take radiation overexposure seriously. Hence, preventive measures and rules must be strictly followed to avoid critical health conditions. Here are top 10 list of rules to remember when working with radiation:

1. Acquire adequate training to better understand the nature of radiation hazards.
2. Reduce handling time of radioactive materials and equipment.
3. Be mindful of your distance from sources of radiation. Increase distance as much as possible.
4. Use proper shielding for the type of radiation.
5. Isolate or contain harmful radioactive materials properly.
6. Armor yourself with appropriate protective clothing and dosimeters.
7. Conduct contamination surveys in the area.

8. Do not eat, drink, smoke, or even apply cosmetics, lotions, or sprays in an investigative area where radioactive substances are identified.
9. Call the appropriate authority for proper radioactive waste disposal
10. Conduct regular radiation safety self-inspections

Use a radiation safety checklist for checking compliance with radiation safety measures in an investigation. Accomplish this checklist using the Omicron Field Handbook during radiation safety inspections by doing the following:

1. Start by inspecting the availability and visibility of radiation warnings.
2. Conduct a contamination survey on the area and check if proper protective equipment is worn by the investigators.
3. Inspect if electrical devices are in good working condition and marked with proper caution.
4. Identify and evaluate if operating and emergency procedures are posted for radiation-producing devices to ensure that equipment has undergone device tests.
5. Complete the inspection by ensuring recommendations and safety protocols are in place.
6. Export reports into various formats depending on your business need, including PDF, Word, or CSV.

EXTRATERRESTRIAL INVESTGATION SAFETY

The investigator of an Extraterrestrial contact and public safety should always be at the forefront of any investigation.

Vehicles

• Containers of collected evidence, and soiled/dirty tools and clothing should all be stored in an area other than the vehicle's passenger compartment or trunk/boot.

• If this is not possible, use tight-sealing tubs/containers for anything that could be contaminated.

Investigators should:

• Maintain a healthy lifestyle.

• Be physically fit and able to perform the job, to include being fit tested on assigned respirators and being able to safely wear and doff an open circuit pressure demand SCBA when necessary.

• Have an annual physical.

• Because the investigation profession could present an increased risk of skin cancer, have an annual skin check, preferably by a dermatologist.

- If there is or has been a prior positive skin exam, these may need to be done more frequently.

• Immediately clean and bandage any skin area that gets a cut or abrasion. o Any existing cut or abrasion should be bandaged before starting the scene examination.

• Maintain a written log of every scene examination that includes at a minimum:

o Date, location and nature of each incident.

o The number of hours spent at the scene.

o Notations of the presence of any hazardous condition, or any injury or unprotected exposure possibility.

Enroute to and Arriving at the Incident

• While it's important to know where you are going, the best route of travel and the weather conditions that may be encountered, it is also important to drive safely so that you can arrive at the incident scene in a timely fashion and do your job in a more relaxed and positive state of mind.

• Know about and understand the type of scene you are responding to before you go.
o Ask any necessary questions to gain a full understanding.

• If this is still an active scene, check in with the First Responder, Person in Charge, or Witness.
o Ask about any known safety concerns/issues.

• Conduct a site safety survey of the entire scene before beginning any work and at the start of each subsequent day there.
o Include checking for the presence of hazardous materials, and physical and biological hazards.

• Verify the status of all utilities prior to entering any incident scene.
o Use a lock out/tag out system and procedures for electrical systems as necessary.

• Ensure that you are wearing proper PPE for the incident before approaching the scene for any reason, including an appropriately selected respirator that is approved by the regulatory authorities for scene entry.

During the Incident

• Use air quality monitoring during all interior and exterior examinations.
o Understand monitoring limitations, detection ranges, interferents, maintenance and sustainment requirements.
o Monitor CO (carbon monoxide) and HCN (hydrogen cyanide) at a minimum.

▪ H2S (hydrogen sulfide) and LEL (lower explosive limit) are also good.

• Use powered ventilation fans to physically move ambient air and propel contaminants downwind from the investigation scene. For gases and vapors, ventilation is your friend.

• Wear appropriate PPE for the incident you are attending; every scene is somewhat different. This includes:

- o Steel-toed leather or rubber boots/shoes with a puncture-resistant sole, understanding the limitations of each type.
- o Disposable Tyvek suit with hood.

▪ If these are not available, wear incident retardant coveralls or long pants and a long sleeve shirt.
▪ The goal here is to prevent the skin absorption of hazardous chemicals.

- o Protective safety helmet that meets or exceeds ANSI Z89.1-2014 for industrial use, with a chin strap.
- o Hearing protection that meets or exceeds ANSI A10.46-2013
- o Proper respiratory protection equipment for the situation as found.

▪ See Appendix A for additional respiratory protection information.

- o Vented goggles if wearing a half-mask respirator.
- o Disposable outer gloves and nitrile inner gloves.
- o Ensure that all PPE technologies in use can be pre-determined as being compliant to existing standards development organization published technical standards.

• Have a process where someone knows where you are and what you are doing.

• Conduct all scene examinations with at least two persons unless the status or nature of the scene indicates that it is safe for one person.
▪ Whenever a single investigator is present, have a plan in place where you are checked on regularly but no less frequently than every half hour.

• Take regular breaks as needed, well away from the incident scene.
o If you are going to eat or drink anything, remove all PPE and wash hands and face with soap and water, cleansing wipes or a waterless cleaner.

- o All nitrile gloves and leather/canvas gloves and similar are one use and done. In addition to any evidence collection requirements, these need to be replaced each time they are removed.
- o The use of SCBA, high temperatures and/or humidity, and/or extensive digging may necessitate more frequent and/or longer breaks and hydration.

After the Incident

• Following proper doffing/de-robing procedures (see Appendix B), immediately remove all PPE:

  o Place all disposable items in a minimum 4 mil thick plastic bag, seal it with duct tape or similar and dispose of it properly.

▪ Do not leave this bag at the scene unless you know that it will be properly disposed of by a remediation company.

  o Place all to-be-cleaned clothing items in a minimum 4 mil thick plastic bag and seal it with duct tape or similar.

▪ When this bag is reopened you should be wearing gloves and proper respiratory protection.

• It is best to open this bag in a well-ventilated area or outdoors to allow any volatile substances to evaporate before handling the contaminated items.

▪ These items should be decontaminated and washed as soon as possible (see below for additional information).

▪ Close and seal the empty bag to prevent any further exposure or contamination.

• Using soap and water or cleaning wipes, clean all skin areas that may have been exposed to soot contamination (see also footnote 7).

• Clean tools and respirator assembly immediately after use with an approved cleaning agent and water and before returning them to your vehicle.

  o If this is not possible, store them out of the vehicle's passenger compartment and trunk/boot.

• Do not transport dirty tools and/or contaminated clothing or PPE, or evidence containers containing samples in your vehicle's passenger compartment or automobile trunk/boot.

  o Remove all outer clothing using proper methodology (see Appendix B).
  o Replace contaminated footwear with clean before entering vehicle, or
  o Thoroughly clean footwear before entering vehicle (see Appendix B).
  o If this is not possible, place all items in a sealed container.

• Do not enter, or allow others to enter, your vehicle's passenger compartment unless ALL potentially contaminated clothing has been removed and all exposed skin areas have been cleaned.

While disposable coveralls are preferred, do not wash contaminated clothing in your

personal washing machine if possible.

- o Use an extractor-type washing machine (found in many incident stations), or
- o Use a commercial laundry/dry cleaner and tell them that the items are contaminated.
- o Do not use local laundromat machines.
- o If a personal/home washing machine must be used, wash incident-contaminated clothing articles by themselves. When finished, run an empty complete wash cycle with soap.

Follow industry-established decontamination procedures for tools, PPE and other contaminated items.

- o See Appendix B for additional information regarding decontamination.

As soon as possible, take a shower to clean any particulates from your hair and skin.

Part II – Incident Scene Investigator Precautions and PPE Protection Categories

All incident scenes have the potential for being unsafe in many ways and the proper use of PPE and safety procedures can mitigate these risks. However, many incident investigators do not fully understand and appreciate the health risks associated with incident investigations. To help incident investigators understand the precautions that should be taken at the various types of incident scenes, a hazardous materials-style, time-based scene classification system is offered to denote the various stages of incident scenes, from an investigative perspective, to help incident investigators know the PPE safety measures needed.

It is understood and acknowledged that every incident scene is somewhat different, and it is difficult to make across-the-board recommendations or requirements. However, the health risks associated with incidents are broad-based and apply to almost every incident situation. Likely one of the most misunderstood concepts has to do with particulates. Some investigators believe that if they don't see any particulates in the air then things are OK. However, very small particulates (< 5 micrometers in size) are invisible to the naked eye, and these particles can penetrate deep into the lungs where clearance mechanisms are less effective and where inflammation and systemic absorption can occur. Repeated exposure to these small particles could lead to chronic health conditions down the road.

THE PPE listed here is more fully described in Part I above. Additional respiratory protection equipment information is found in Appendix A.

HOT SCENE A – A Crash incident scene where there has been a incident extinguished but overhaul has not yet commenced or is in progress.
In this situation investigators sometimes need to enter the structure or scene after consultation with the First Responder, Person in Charge to identify those areas that can be investigated and those areas, where investigation and recovery should either be limited or not done at all.

While it is strongly recommended that investigators not enter catastrophic scenes during this period, the investigator is usually only entering to make a quick, initial determination and possibly take some initial photos, and should be wearing the following PPE.

- Turnout gear, including bunker pants and coat, structural incident fighter helmet, structural incident fighter boots and structural incident fighter gloves.
- Proper respiratory protection equipment offering the below NIOSH (or similar in other countries) awarded protection:
    - o SCBA as a primary technology with the ability to downgrade to APR, PAPR or ½ mask after site characterization and determination of an accurate maximum hazard ratio, and with tight fitting full face mask with a minimum of P100/OV/FM/CL (multi-gas/vapor) canisters or serviceable CBRN Cap 1 canisters.

- Work duty coveralls or similar underneath turnout gear to aid in self decontamination.

Note 1: In virtually every instance of this type, the incident investigator is working for a public incident agency. Private incident investigators are typically not at a incident scene during this period.

Note 2: Investigators should only enter scenes that have not yet been fully extinguished under the most extenuating circumstances, and then only when wearing full structural incident fighter PPE and SCBA.

SECURE THE SCENE

When an incident occurs, the most important thing to do is provide the necessary help in the form of first aid or other medical assistance to any injured individual on site. Only after this should you look at starting your investigation.

The first step in the investigation is to secure the incident scene and preserve any physical evidence using cones or other barriers to protect sensitive areas. If the investigation team has to travel a long distance to reach the scene, a First Responder should be instructed to carry out this step. The investigation team should also make sure to follow any safety guidelines required by the site, wearing personal protective equipment (PPE) if necessary.

Once the scene is secured, start documenting the scene by taking photos or videos of the scene, and collecting any perishable physical evidence including CCTV tapes and samples. Depending on the nature of the incident, it might be useful to record what equipment was being used when the incident occurred, weather conditions at the time of the incident, positions of physical evidence and individuals, controls, and safety devices, and other relevant information.

HOT SCENE B – A Crash scene that has been fully extinguished less than two hours.
Regardless of the amount of ventilation, these scenes are very dangerous for incident investigators
because of the potential for high levels of gases and particulates (e.g., smoldering items). It is strongly recommended that incident investigators not enter incident scenes to undertake any investigative actions during this period. If there is a need to enter, incident investigators should limit their actions and time in the scene while following a vetted respirator selection logic (i.e. (U.S.) NIOSH

Respirator Selection Logic 2004: https://www.cdc.gov/niosh/docs/2005-100/pdfs/2005-100.pdf) and wearing the below PPE.

- Turnout gear, including bunker pants and coat, structural incident fighter helmet, structural Incident fighter boots, or
    - o Coveralls (preferably disposable with hood) that completely cover the arms and legs. As noted in Part I, these should not be worn if there is a chance of incident re-ignition.
    - o Helmet with chin strap.
    - o Boots with steel toe and puncture-resistant sole (see footnote above)
- Respiratory protection
    - o SCBA (see U.S. OSHA https://osha.gov/Publications/3352-APF-respirators.pdf
      or
    - o Other proper respiratory protection equipment as identified in Appendix A.
- Structural incident fighter gloves, or disposable leather gloves with nitrile gloves underneath

WARM SCENE – A Crash scene that has been fully extinguished at least two hours but less than 72 hours.
This is the typical time period when many public investigator scene examinations are conducted. But it is also the time when a significant particulate and gas/vapor exposure hazard exists. All incident investigators conducting any type of examination within the incident scene during this period should wear the below PPE and be aware of or have immediate access to environmental monitoring data stay times, escape times and time weighted averages of toxic industrial chemicals (TIC) while on scene.

• Coveralls (preferably disposable with hood) that completely cover the arms and legs.
• Helmet with chin strap.
• Boots with steel toe and puncture-resistant sole.

Proper respiratory protection equipment as identified in Appendix A.
Disposable leather gloves with nitrile gloves underneath.

Note 4: The 72-hour threshold is used because studies have shown that some gas residue can be present at some crash scenes for as long as 72 hours. Should future research amend this number then this may be changed accordingly.

COLD SCENE – A crash scene that has been fully extinguished for at least 72 hours and not generating detectable or visible dust, fumes, mists, particulates, gases, vapors or aerosols. Current research indicates that particulate and gas hazards are greatly reduced after 72 hours, when debris is not disturbed. However, when moving debris or digging of the scene occurs, particulates are introduced into the localized air and gas pockets can be released, thus creating a health hazard for the investigator. Even the mere act of walking through a scene post-crash can create this hazard. While certain situations may warrant a cursory, unprotected look at a scene, incident investigators conducting any type of examination within the incident scene during this period should wear the following PPE and address the rehabilitation/recovery needs of incident investigators.
• Coveralls (preferably disposable with hood) that completely cover the arms and legs.
• Helmet with chin strap.
• Boots with steel toe and puncture-resistant sole.
• Proper respiratory protection equipment as identified in Appendix A.
• Disposable leather gloves with nitrile gloves underneath.

INTERVIEWING WITNESSES

Witness Interviews Are Key to an Incident Investigation

There are many steps to an incident investigation, including:

- Securing the scene of the incident to preserve evidence
- Designating the incident investigation team and lead investigator
- Collecting different types of evidence and data
- Interviewing witnesses

- Analyzing the evidence, the data, and witness interviews
- Identifying root causes
- Preparing the incident investigation report
- Launching action plans to address root causes of incidents

Ideally you should set and follow rules or guidelines for most of the steps to ensure a successful incident investigation.

Interviewing witnesses can be a difficult task

Interviewing witnesses can be complex, and it can be one of the most difficult tasks for an investigator. Depending on the nature of an accident, witnesses can be under great emotional stress. Memory can fade or can even be flawed. Also, humans are prone to irrationalities and cognitive biases. For all these reasons, guidelines are needed to make sure that witness interviews produce valuable and accurate information.

Here are guidelines that you can adopt:

- Interview the witness as soon as possible after the incident.
- Interview the witness alone, not in a group.
- Explain and highlight the reason for the investigation (to determine what happened and why).
- Make sure that the witness is aware that the purpose of the investigation is not to assign blame.
- Ask if it's OK to record the interview.
- Make the witness feel comfortable.
- Don't behave in a way that may intimidate the witness.
- Pay attention to the tone of your voice.
- Don't display your emotions.
- As much as possible, ask open-ended questions that cannot be answered simply by "yes" or "no".
- If possible, ask the witness to re-enact the sequence of events that led to the incident.
- Avoid questions that prompt or encourage the desired answers.

- Don’t interrupt the witness.
- Remember to let the witness talk and to listen to them.
- Confirm that you have the correct statements.
- Make also note of the witness’s feelings and emotions, not just their words.
- Close on a positive note.

Based on your own unique circumstances, you can also complement the guidelines with other elements.

TYPES OF EVIDENCE

An incident investigator’s task is to collect and organize evidence to uncover the truth behind the incident. However, information gathered can be misleading. Witnesses may tell conflicting stories about the same incident.

Environmental conditions can change before the investigator arrives at the scene. Paperwork, such as a procedure, may be lost or altered. How can an investigator get to the facts of the incident? By remembering to collect four types of evidence.

There are four types (or categories) of evidence to be evaluated. Omicron investigators call these categories 3 Ps and an R. This stands for:

- People evidence (Either Extraterrestrial or humans on site)
- Paper evidence
- Physical evidence
- Recording evidence

People Evidence

Often, evidence collection starts with people evidence (a witness statement), and that evidence guides the investigator to collect paper, physical and recording evidence.

Examples of people evidence include:

- Interviews
- Fatigue-related information
- Evidence of injuries, including cuts and scrapes, bruises, fractures, or sprains

- Information about medical conditions that may have influenced performance (refer to HR or corporate counsel for guidance on HIPPA)

Where do you begin? First determine who was involved. This includes those who planned the work, supervised the work and performed the work. Other considerations include a worker's capability, capacity, training, and qualification to perform his or her role.

Inquire into the background of those involved. Determine if they have been involved in any previous incidents or if they have any related performance or conduct issues. Find out if those involved had any work restrictions such as an impairment, physical capability, or lapsed accreditation.

Understand how the employees worked together. What were the dynamics of the team including supervision and team performance. Determine the context (such as environmental conditions, distractions or perspectives).

Paper Evidence

Paper evidence may include all sorts of things including:

- Regulatory paperwork
- Activity-specific paperwork
- Personnel paperwork
- Policy and procedure paperwork
- Equipment manuals

What do you think the biggest mistake is when it comes to collecting paper evidence… given all of the paper that we have in our workplaces? Collecting too much paper not relevant to the investigation!

You don't need to collect every piece of paper at your facility. How do you know what you don't need? By looking at the timeline of events that led to the incident. You need all the paper that

supports your timeline of events and supports the facts. If you use Omicron, you can easily upload digital copies of this paperwork, and highlight relevant pages in your report to management.
Don't make the mistake of collecting so much paper that what you need for evidence is somewhere at the bottom of the stack.

Physical Evidence

Physical evidence can range from a very large piece of machinery to a very small tool. It includes hardware and solid material related to the incident. You will gather physical evidence in one of two ways. You will collect it or you will record/document evidence that can't be collected (for example, it is too large to collect, or it is still in use).

Types of physical evidence to collect:

- Broken equipment / parts
- Residue / debris
- Fluid samples
- Paint samples
- Fiber
- Hair, bloodstains, tissue or other DNA

Types of physical evidence to record/document

Evidence is recorded when it is impossible to collect or when it is still in use by the workforce. Following is a list of possible evidence to collect by recordings:

- Burn marks and flame patterns
- Tracks
- Indentations
- Fingerprints

- Tools
- Equipment
- Products in use
- Equipment status (fixed, portable or temporary?)
- Lights, noise and temperature
- Confined space
- Obstructions
- Surface hazards
- Housekeeping
- Clarity of signs and labels
- Instructions

Following are additional pieces of information you may want to collect:

- Failure history
- Modification / change of use
- Operator interface
- Maintenance records
- Installing / commissioning
- Storage / transportation
- Procurement
- Design / fabrication

Recording Evidence

Recording evidence, such as photography and video, should be captured as soon as possible after an incident to preserve the scene in images before it is altered in any way. It provides a documented overview of the entire scene. This may occur as soon as you or a qualified team member can obtain access to the scene.

In addition to video and photography recorded by the investigator, recordings include:

- Video footage (examples: site security cameras, control room cameras)
- Audio recordings (examples: an audio of the noise level, voicemail recordings)
- Photos (examples: cell phone photos captured by bystanders to the incident, photos taken before the incident occurred)
- Computer data (example: magnetic swipe card system security data for entry doors, computerized data from process equipment)
- Sketches of an incident scene

As you record the scene, ask "Am I recording the scene as it was in its original state or has it changed in any way?" If the scene has changed, make a note about what has changed. Identify fragile, perishable evidence and immediately document, photograph and collect it. Also, make a note of any transient evidence that can't be captured by camera or video like smells and temperature.

Remember, the best way to collect unbiased evidence is to gather evidence from each of the four categories: people, physical, paper and recordings. Each piece of evidence collected will lead you to the truth of the incident so that you can identify problems and analyze root causes for effective corrective actions.

INVESTIGATION REPORT

So, you've been assigned as the team leader for an incident investigation. You're ready to conduct your investigation, you have your team together, and you have a good understanding of the problem at hand. Before you get too far along, keep in mind that the final product of your investigation will be some type of report of your findings. Now would be a good time to assess management's expectations for your final report. Here are 5 tips to help you produce a quality incident report.

2) Include just the facts

Make sure your report contains just the facts you discovered during your investigation. Your root cause analysis is based on facts and evidence collected by your team. There should be no opinions

or judgements. You are trying to keep your biases out of the investigation, and management will quickly spot any indication that you had an agenda in mind.

2) Create a sequence of events that led to the incident

Omicron has its own Incident Report to collect and display data. Often, reports are difficult to read. The data is presented out of chronological order, spread out across the report. Paragraphs of information are written, sometimes in long, complex sentences that don't give a clear picture of the problem. This is not how you should present your findings.

The Omicron Report is a great way to give a visual representation of the data collected. It makes it simple to understand exactly what happened, while at the same time identifying any holes in the investigation. By presenting the data in a visual format, management will have a much clearer picture of the incident, and they will need far less verbal clarification of the data.

3) Ensure that your corrective actions are fixing root causes

Now all reports record corrective actions as they may not apply to the incident being investigated. However, it the instance requires some note of corrective actions then they should be appropriately noted in the report. Poorly-written reports rarely list root causes for the incident, but then provide corrective actions that do not directly address those root causes. Putting corrective actions in a table format, showing each root cause and its associated corrective actions, ensures that you are not providing extra corrective actions that do not fix the problems found.

4) Use a common report format

In order to easily assess your results, management should expect all incident reports to be in the same format. The actual format used is not especially critical. However, the reports submitted to your management team should be in a format that is agreed to in advance. Omicron allows you to provide global report templates to your investigation teams. This has several advantages:

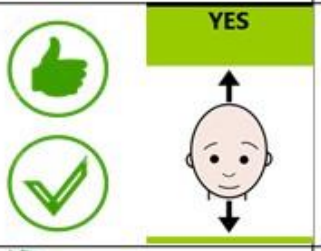
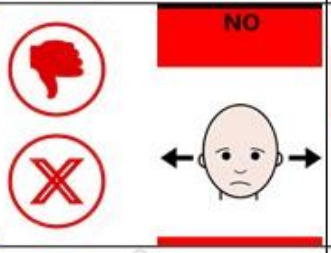
- It is much easier to write the report. Your team does not have to start reports from scratch each time. This saves a lot of time and effort.
- It also makes the review of the results much more efficient. Investigators know what to expect in each report, and they don't have to page through the report looking for specific pieces of data. Everything is in the same place each time, and your investigators will be able to quickly review the results and other actions to be taken.

5) Provide periodic updates

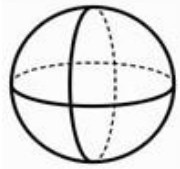
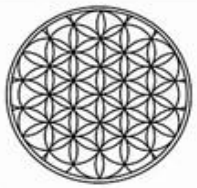
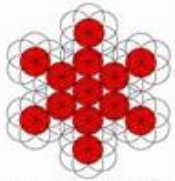
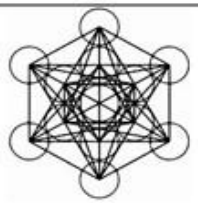
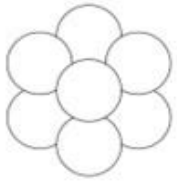
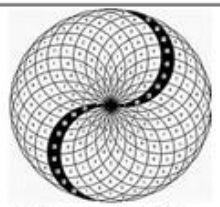
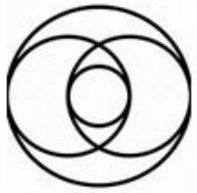
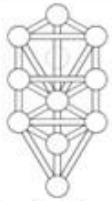
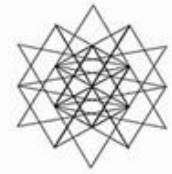
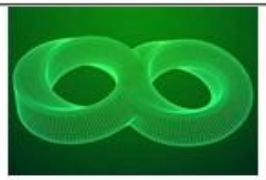
Finally, you should provide periodic updates on the status of the investigation. You should give periodic updates on the status of the investigation, either verbally or in the form of a preliminary report. The incident report is the clear, concise, final product of your investigation that is submitted.

PICTOGRAPHS

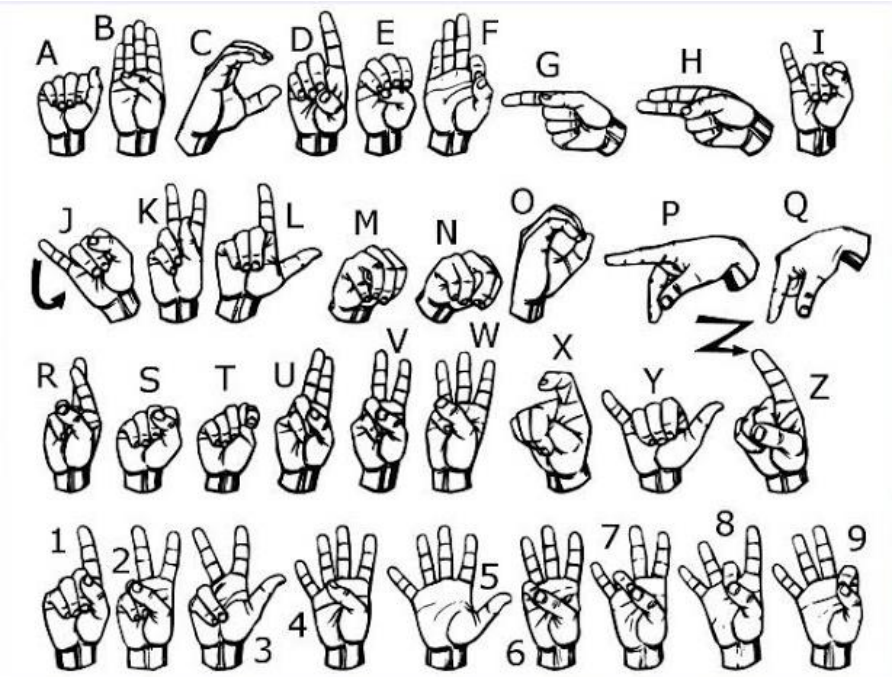
An expression or communication by means of pictures and drawings having a communicative aim. These pictures and drawings (called pictographs) are a forerunner of true writing and are characterized by stereotyped execution and by omission of all details not necessary for the expression of the communication.

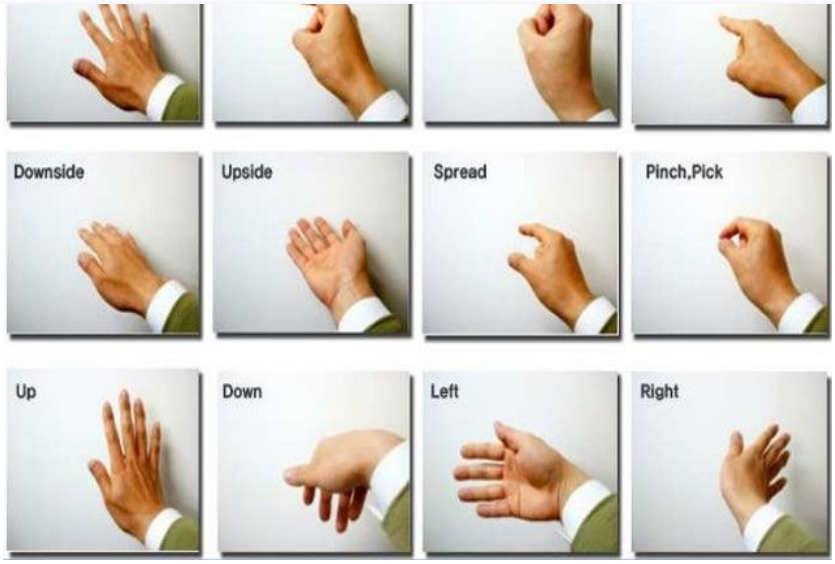
 Earth Moon	 United States		 Man Woman	 Children Baby
 Soldier	 Investigator	 Scientist	 Engineer	 Rescue
			 Time	 Help
 Map	 House	 Car	 Airplane	 Spacecraft
 Happy	 Sad	 Angry	 Afraid	 Hurt

long Short	NEAR FAR	OVER UNDER	I Me Me	You You
Hot	Cold	listen Hear	noise Noise	Give
Tall Short	More Less	Big Small	Left	Right
Dog Cat	Cow	Horse	Snake Lizard	White
Red	Blue	Yellow	Green	Black

 Sphere – Divine - Oneness	 Flower of Life - Cycles	 Fruit of Life – Feminine - Movement	 Incircle- perfection - Union	 Metatron – Energy of All Things
 Sri Yantra – Liberation - Balance	 Egg of Life – Living Organism	 Golden Mean – Ratio - Phi	 Spiral – Creation - Transformation	 Fibonacci - Nature
 Tetrahedron – Fire - Existence	 Cube – Earth - Belief	 Octahedron – Air - Awakening	 Dodecahedron – Aether - Purifier	 Icosahedron – Water – Fluidity - Change
 Pentagon – Universal Unity	 Merkaba Star – Energy Matrix	 Vesica Pisces – Physical Worlds	 Pentagram – Precise - Harmony	 Tree of Life – Creation - Universal
 Hexagram – Masculine/Feminine	 Hexahedron – Consistency - Balance	 Pyramid – Geomancy - Encoding	 Octagon – Perfection - Passage	 Infinity – Mobius -Universe

DEEP LEARNING HAND GESTURES





Hand gesture recognition becomes a popular topic of deep learning and provides many means to apply this contactless application field for bridging the human mind and smart sensing.

ALPHABET SYSTEMS

An alphabet is a standardized set of basic written graphemes (called letters) representing phonemes, units of sounds that distinguish words, of certain spoken languages. Not all writing systems represent language in this way; in a syllabary, each character represents a syllable, and logographic systems use characters to represent words, morphemes, or other semantic units.

Uppercase Alphabet Mat

A	B	C	D	E
F	G	H	I	J
K	L	M	N	O
P	Q	R	S	T
U	V	W	X	YZ

Lowercase Alphabet Mat

a	b	c	d	e
f	g	h	i	j
k	l	m	n	o
p	q	r	s	t
u	v	w	x	y z

PHOENECIAN

A COMPARATIVE TABLE OF ANCIENT ALPHABETS.

HEBREW.	NAME AND POWER OF THE HEBREW LETTERS.			RABBINIC HEBREW	ARABIC.	SAMARITAN.	SYRIAC.	PHŒNICIAN.	ANCIENT HEBREW.	ANCIENT GREEK.
א	Aleph	*a*	1	א	ا	𐤀	ܐ	𐤀	𐤀	Α
ב	Beth	*b*	2	ב	ب	𐤁	ܒ	𐤁	𐤁	Β
ג	Gimel	*g*	3	ג	ج	𐤂	ܓ	𐤂	𐤂	Γ
ד	Daleth	*d*	4	ד	د	𐤃	ܕ	𐤃	𐤃	Δ
ה	He	*h*	5	ה	ه	𐤄	ܗ	𐤄	𐤄	Ε
ו	Vav	*v*	6	ו	و	𐤅	ܘ	𐤅	𐤅	Ϝ
ז	Zain	*z*	7	ז	ز	𐤆	ܙ	𐤆	𐤆	*I*
ח	Cheth	*ch*	8	ח	ح	𐤇	ܚ	𐤇	𐤇	Η
ט	Teth	*t*	9	ט	ط	𐤈	ܛ	𐤈	𐤈	Θ
י	Yod	*y*	10	י	ي	𐤉	ܝ	𐤉	𐤉	Ι
כ ך	Caph	*k*	20	כ ך	ك	𐤊	ܟ	𐤊	𐤊	Κ
ל	Lamed	*l*	30	ל	ل	𐤋	ܠ	𐤋	𐤋	Λ
מ ם	Mem	*m*	40	מ ם	م	𐤌	ܡ	𐤌	𐤌	Μ
נ ן	Nun	*n*	50	נ ן	ن	𐤍	ܢ	𐤍	𐤍	Ν
ס	Samech	*s*	60	ס	س	𐤎	ܣ	𐤎	𐤎	Ξ
ע	Ain	*e*	70	ע	ع	𐤏	ܥ	𐤏	𐤏	Ο
פ ף	Pe	*p*	80	פ ף	ف	𐤐	ܦ	𐤐	𐤐	Π
צ ץ	Tzade	*tz*	90	צ ץ	ص	𐤑	ܨ	𐤑	𐤑	Ϻ
ק	Koph	*k*	100	ק	ق	𐤒	ܩ	𐤒	𐤒	Ϙ
ר	Resh	*r*	200	ר	ر	𐤓	ܪ	𐤓	𐤓	Ρ
ש	Shin	*sh*	300	ש	ش	𐤔	ܫ	𐤔	𐤔	Σ
ת	Tau	*t*	400	ת	ت ث	𐤕	ܬ	𐤕	𐤕	Τ

ARABIC VOWELS.

- ـَ Fatta *a* in art.
- ـِ Kesre *e* in bed, *i* in it.
- ـُ Damma *o* in hot.
- ـً = an, ـٍ = en, ـٌ = on — at the end of words.

HEBREW VOWELS.

- ◌ַ Kamets *a* in psalm.
- ◌ֵ Tsere *a* in mate.
- ◌ִ Chirek long *ee* in feet.
- וֹ or ◌ֹ Cholem *o* in bone.
- ◌ֻ Shureq *oo* in fool.
- ◌ַ Pathach *a* in Sam.
- ◌ֶ Seghol *e* in met.
- ◌ִ Chireq short *i* in fit.
- ◌ָ Kamets-Chatuph *o* in cot.
- ◌ֻ Kibbuts *u* in full.
- ◌ְ Sh'va *ĕ*
- ◌ֲ Chateph Pathach *ă* — very short.
- ◌ֱ Chateph Seghol *ĕ* — very short.
- ◌ֳ Chateph-Kamets *ŏ* — very short.

SYRIAC VOWELS.

- ◌ܲ Petocho *a* in psalm.
- ◌ܰ Revotzo *ea* in head.
- ◌ܴ Chevotzo *ee* in feet.
- ◌ܶ Zekopho *o* in bone.
- ◌ܽ Etzotzo *oo* in food.

TABLE OF ALPHABETS.

ARABIC.

Final.		Medial.	Initial.	
ا	ﺎ	..	..	*a*
ب	ﺐ	ﺒ	ﺑ	b
ت	ﺖ	ﺘ	ﺗ	t
ث	ﺚ	ﺜ	ﺛ	th*in*
ج	ﺞ	ﺠ	ﺟ	dj
ح	ﺢ	ﺤ	ﺣ	h
خ	ﺦ	ﺨ	ﺧ	kh
د	ﺪ	..	..	d
ذ	ﺬ	..	..	th*en*
	ﺮ	..	..	r
	ﺰ	..	..	z
س	ﺲ	ﺴ	ﺳ	s
ش	ﺶ	ﺸ	ﺷ	sh
ص	ﺺ	ﺼ	ﺻ	sç
ض	ﺾ	ﻀ	ﺿ	dd
ط	ﻂ	ﻄ	ﻃ	t
ظ	ﻆ	ﻈ	ﻇ	tz
ع	ﻊ	ﻌ	ﻋ	...
غ	ﻎ	ﻐ	ﻏ	gh
ف	ﻒ	ﻔ	ﻓ	f
ق	ﻖ	ﻘ	ﻗ	k
ك	ﻚ	ﻜ	ﻛ	kh
ل	ﻞ	ﻠ	ﻟ	l
م	ﻢ	ﻤ	ﻣ	m
ن	ﻦ	ﻨ	ﻧ	n
ه	ﻪ	ﻬ	ﻫ	:
و	ﻮ	..	..	w
ى	ﻰ	ﻴ	ﻳ	y
لا	ﻼ	..	..	la

ETHIOPIC.

*ă.	u.	i.	â.	ā.	ĕ, y̆.	o.	
ሀ	ሁ	ሂ	ሃ	ሄ	ህ	ሆ	h
ለ	ሉ	ሊ	ላ	ሌ	ል	ሎ	l
ሐ	ሑ	ሒ	ሓ	ሔ	ሕ	ሖ	hh
መ	ሙ	ሚ	ማ	ሜ	ም	ሞ	m
ሠ	ሡ	ሢ	ሣ	ሤ	ሥ	ሦ	s
ረ	ሩ	ሪ	ራ	ሬ	ር	ሮ	r
ሰ	ሱ	ሲ	ሳ	ሴ	ስ	ሶ	s
ቀ	ቁ	ቂ	ቃ	ቄ	ቅ	ቆ	k
በ	ቡ	ቢ	ባ	ቤ	ብ	ቦ	b
ተ	ቱ	ቲ	ታ	ቴ	ት	ቶ	t
ኀ	ኁ	ኂ	ኃ	ኄ	ኅ	ኆ	kh
ነ	ኑ	ኒ	ና	ኔ	ን	ኖ	n
አ	ኡ	ኢ	ኣ	ኤ	እ	ኦ	*a*
ከ	ኩ	ኪ	ካ	ኬ	ክ	ኮ	k
ወ	ዉ	ዊ	ዋ	ዌ	ው	ዎ	w
ዐ	ዑ	ዒ	ዓ	ዔ	ዕ	ዖ	...
ዘ	ዙ	ዚ	ዛ	ዜ	ዝ	ዞ	z
የ	ዩ	ዪ	ያ	ዬ	ይ	ዮ	y
ደ	ዱ	ዲ	ዳ	ዴ	ድ	ዶ	d
ገ	ጉ	ጊ	ጋ	ጌ	ግ	ጎ	g
ጠ	ጡ	ጢ	ጣ	ጤ	ጥ	ጦ	t
ጰ	ጱ	ጲ	ጳ	ጴ	ጵ	ጶ	p
ጸ	ጹ	ጺ	ጻ	ጼ	ጽ	ጾ	z
ፀ	ፁ	ፂ	ፃ	ፄ	ፅ	ፆ	sz
ፈ	ፉ	ፊ	ፋ	ፌ	ፍ	ፎ	f
ፐ	ፑ	ፒ	ፓ	ፔ	ፕ	ፖ	p

ARMENIAN.

ա	a
բ	p
գ	k
դ	t
ե	je
զ	ss
է	e
ը	ĕ
թ	th
ժ	sh
ի	i
լ	l
խ	hh
ծ	ds
կ	gh
հ	h
ձ	zz
ղ	gh
ճ	dsh
մ	m
յ	j
ն	n
շ	sch
ո	o
չ	tsch
պ	b
ջ	dj
ռ	rr
ս	s
վ	v
տ	d
ր	r
ց	tz
ւ	v,u
փ	pp
ք	kh
ֆ	f

COPTIC.

ⲁ	a
ⲃ	b,v
ⲅ	g
ⲇ	d
ⲉ	ĕ
ⲍ	z
ⲏ	ei
ⲑ	th
ⲓ	i
ⲕ	k
ⲗ	l
ⲙ	m
ⲛ	n
ⲝ	x
ⲟ	ŏ
ⲡ	p,b
ⲣ	r
ⲥ	s
ⲧ	t,d
ⲩ	u
ⲫ	ph
ⲭ	ch
ⲯ	ps
ⲱ	ō
ϥ	f
ϫ	sj
ϭ	sz
ϣ	sh
ϩ	h
ϧ	kh
ϯ	ti

GREEK.

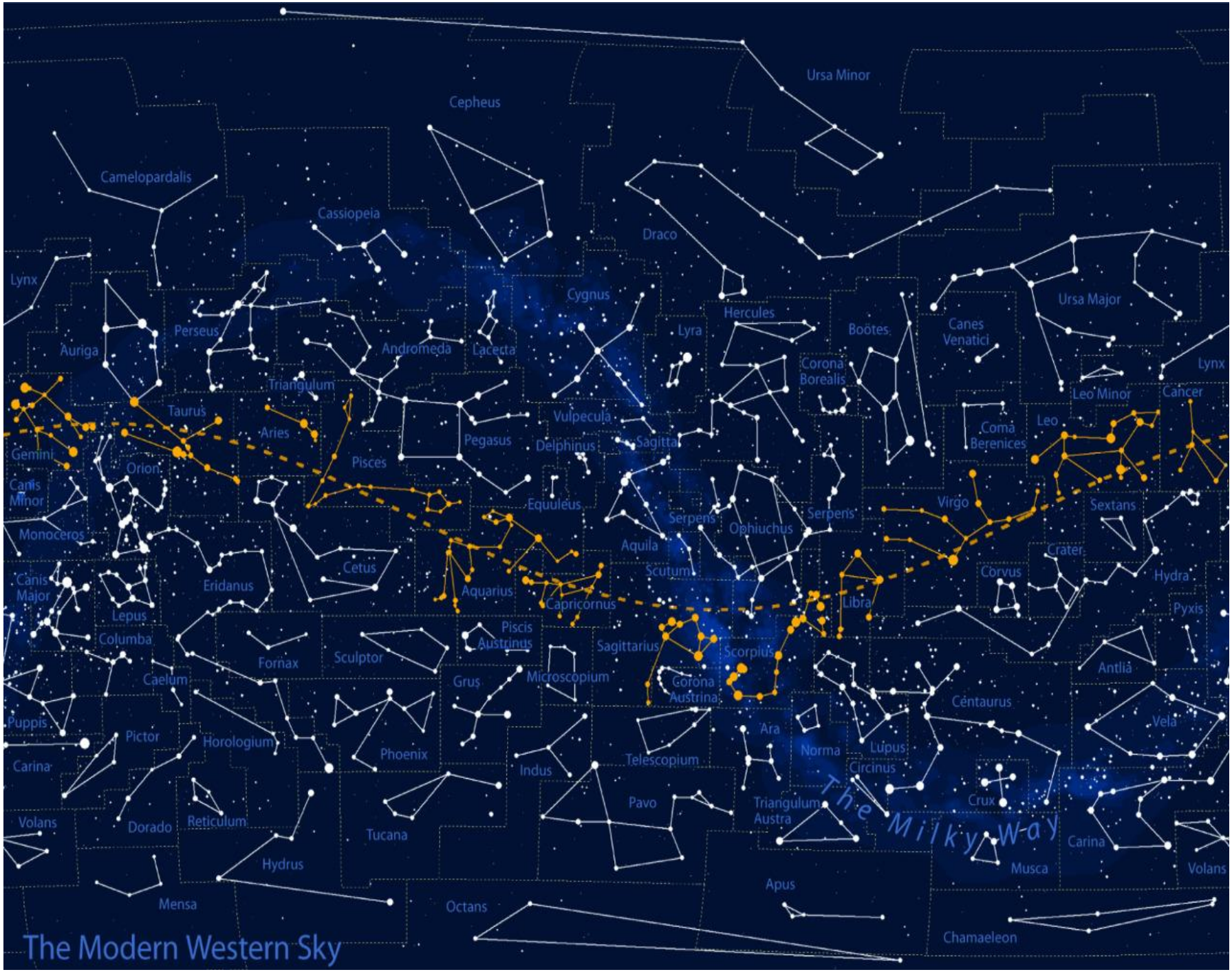
Α	α	a
Β	β	b
Γ	γ	g
Δ	δ	d
Ε	ε	ĕ
Ζ	ζ	z
Η	η	ē
Θ	θ	th
Ι	ι	i
Κ	κ	k
Λ	λ	l
Μ	μ	m
Ν	ν	n
Ξ	ξ	x
Ο	ο	ŏ
Π	π	p
Ρ	ρ	r
Σ	σ ς	s
Τ	τ	t
Υ	υ	u
Φ	φ	ph
Χ	χ	ch
Ψ	ψ	ps
Ω	ω	ō

GERMAN.

𝔄	𝔞
𝔅	𝔟
ℭ	𝔠
𝔇	𝔡
𝔈	𝔢
𝔉	𝔣
𝔊	𝔤
ℌ	𝔥
ℑ	𝔦 𝔧
𝔎	𝔨
𝔏	𝔩
𝔐	𝔪
𝔑	𝔫
𝔒	𝔬
𝔓	𝔭
𝔔	𝔮
ℜ	𝔯
𝔖	𝔰
𝔗	𝔱
𝔘	𝔲
𝔙	𝔳
𝔚	𝔴
𝔛	𝔵
𝔜	𝔶
ℨ	𝔷

* Vowel Sounds.

ă as in Sam.	*ĕ* as in met.	*ŏ* as in cot.
â as in psalm.	*ē* as in feet.	*ō* as in bone.
ā as in mate.	*i* as in fit.	*u* as in full.


Ursa Minor
Cepheus
Camelopardalis
Cassiopeia
Draco
Lynx
Cygnus
Hercules
Ursa Major
Perseus
Lyra
Boötes
Canes Venatici
Auriga
Andromeda
Lacerta
Corona Borealis
Lynx
Triangulum
Leo Minor
Cancer
Taurus
Vulpecula
Leo
Aries
Pegasus
Delphinus
Sagitta
Coma Berenices
Gemini
Pisces
Orion
Canis Minor
Equuleus
Virgo
Sextans
Serpens
Serpens
Ophiuchus
Monoceros
Aquila
Crater
Cetus
Scutum
Corvus
Hydra
Canis Major
Eridanus
Aquarius
Capricornus
Libra
Pyxis
Lepus
Piscis Austrinus
Columba
Sagittarius
Scorpius
Sculptor
Fornax
Antlia
Caelum
Grus
Microscopium
Gorona Austrina
Centaurus
Puppis
Ara
Vela
Pictor
Horologium
Norma
Lupus
Carina
Phoenix
Telescopium
Indus
Circinus
Pavo
Crux
Triangulum Austra
Volans
Dorado
Reticulum
Tucana
The Milky Way
Carina
Hydrus
Musca
Volans
Apus
Mensa
Octans
Chamaeleon
The Modern Western Sky

EXTRATERRESTRIAL VISITATION PHENOMENA INCIDENT REPORT

Form Number ORRI	Month	Day	Year	Type Mode	Number of Pages	of

Terrain Map Attached Address: State: County: Yes No

Omicron RRI Agent:		
Witness Name:		
Street Address		
City	State	Zip

Type of Phenomena:
(A) Contretemp (B) Craft (C) Crash (D) Probe (E) Sighting

Mode of Phenomena:
(a) Aerial (b) Underwater (c) Land (d) Underground (e) Space

Describe what happened:

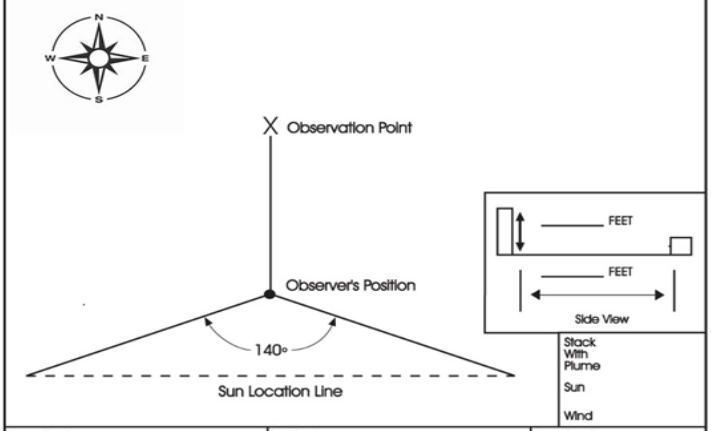
Vertical Angle to Obs. Pt.	Direction to Obs. Pt. (Degrees)
Height: Degree of angle:	Distance: Unit:
Vegetation State: Height: Conditions:	Species:

Sound Emissions:	
Frequency: Vibration: Decibel: Cymatic:	
Sound Generation: Physical Electrical Mechanical Other	Water Droplet Plume Attached ☐ Detached ☐ None ☐

Background Setting: Daylight Night sky Overcast Lightening Thunder Artificial Lighting		
Odors: Plume: Smell: Meter:	Weather Condition: Clear Cloudy Rain Hail Snow	
Ambient Air Temp: Dry Humid Condensation Artificial	Wind Direction Start	Speed: End
Water Temp: Flow: Lake Stream River Canal Bay Ocean	Water Condition:	Water Depth:

Circle Direction

Layout Sketch



Longitude	Latitude	Declination

Additional Information:

Observation Date	Time Zone	Start Time	End Time

	Item	Reading/Units	Comments
1	ELF Radiation		
2	RF Radiation		
3	Microwave Radiation		
4	Magnetic Field Radiation		
5	Electric Field Radiation		
6	Dirty Electric Radiation		
7	Alpha Radiation		
8	Beta Radiation		
9	Gamma Radiation		
10	Ultraviolet		
11	pH		
12	Particulate Matter		
13	Carbon Monoxide		
14	Ozone		
15			
16			
17			
18			
19			

Testimony

Witness Name/Contact Info

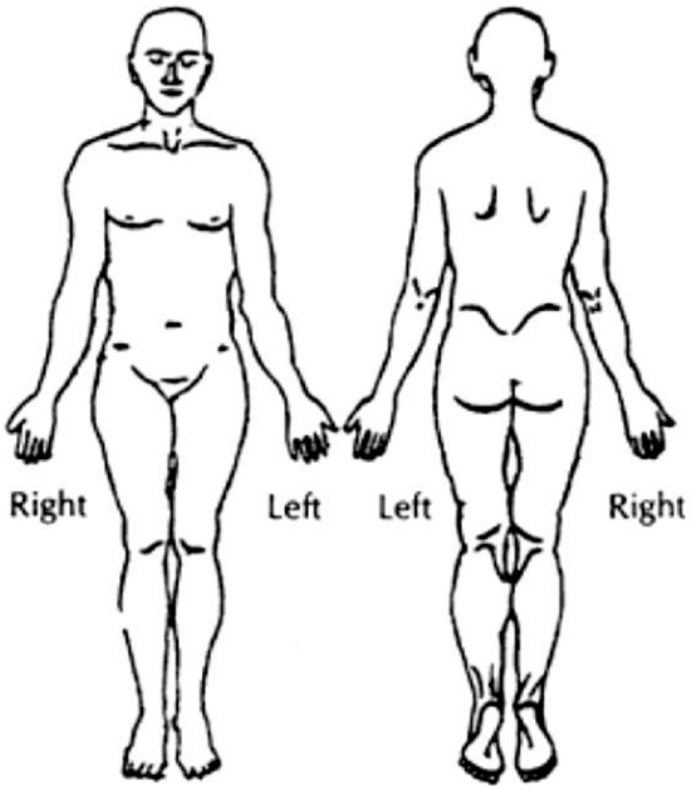
Address:

Witness Name/Contact Info

Address:

Observer's Name (Print)	
Observer's Signature	Date
Organization	
Certified By	Date

VEOF1.1



A. Skin intact (red but blanchable)
B. Stage I (red non blanchable)
C. Stage II (broken surface/epidermis)
D. Stage III (full thickness tissue loss)
E. Stage IV (bone visable)
F. Unstagable pressure ulcer
G. Venous stasis
H. Arterial stasis (necrotic toes/fingers)
I. Incisions
J. Bruising
K. Ecchymosis
L. Skin Tear
M. Excoriation
N. Abrasion
O. Scab
P. Hematoma
Q. Cyanosis
R. Jaundice
S. Edema
T. Rash
U. Deep Tissue Injury
V. Laceration
W. Other

Date: Time: Case ID:

Assessment of Trauma, Damage, Condition, or Observation

Item	Intact Y/N	Type	Size	Comments

Photos Attached ☐ Serial # _____ thru _____

Description of Entity

_____
_____
_____
_____
_____

ENTITY RECOVERY ASSESSMENT

Appendix A – Respiratory Protection Guidelines

The United States Department of Labor, Occupational Safety and Health Administration, has a tool on their website to assist with proper respirator selection and related information at https://www.osha.gov/SLTC/etools/respiratory/index.html. One of the information subsets provided discusses the employer's responsibility to conduct an exposure assessment. "Employers must make a 'reasonable estimate' of the employee exposures anticipated to occur as a result of those hazards, including those likely to be encountered in reasonably foreseeable emergency situations, and must also identify the physical state and chemical form of such contaminant(s)." This includes an identification of the respiratory hazards that could be present.

While it is known that some hazards, such as particulates, will be present at virtually every post-incident scene, we don't know their precise make-up and typically don't know exactly what gas and/or vapor hazards might be present unless extensive sampling is done. While sampling is the "gold standard" of hazard detection, it is often not practical in these situations. There are other alternatives:

- "You can use data on the physical and chemical properties of air contaminants, combined with information on room dimensions, air exchange rates, contaminant release rates, and other pertinent data, including exposure patterns and work practices, to estimate the maximum exposure that could be anticipated in the workplace.
- Data from industry-wide surveys by trade associations for use by their members, as well as from stewardship programs operated by manufacturers for their customers, are often useful in assisting employers, particularly small-business owners, to obtain information on employee exposures in their workplaces."

From https://www.osha.gov/SLTC/etools/respiratory/change_schedule_exposure.html

Although there is ample information that identifies the many harmful gases and vapors that could be present at a post-incident scene, very little research data exists today regarding the actual composition and amounts, and there are so many scene variables that definitive numbers may be very hard to come by. The IAAI Health and Safety committee is working to conduct studies that will help identify the presence and levels of gases and vapors in the post-incident environment and at some point in the future this information will help with respirator selection. Until then the OSHA website says that, "you should account for potential variation in exposure by using exposure data collected with a strategy that recognizes exposure variability, or by using worst-case assumptions and estimation techniques to evaluate the highest foreseeable employee exposure levels. The use of safety factors may be necessary to account for uneven dispersion of the contaminant in the air and the proximity of the worker to the emission source."

Even with this information, deciding on the best respirator solution for incident investigators can be challenging. To use the OSHA respirator selection advisor genius software, you must know the several workplace parameters, two of them being the OSHA permissible exposure limit (PEL) and the maximum exposure level (TWA) in the workplace of a single contaminant and its physical state: gases, vapors and particulates.
https://www.osha.gov/SLTC/etools/respiratory/advisor_genius_nrdl/work_categories.html

This of course requires the identification of specific items which, as discussed above, is very challenging in the post-incident environment.

In the U.S., OSHA regulations require that a competent decision maker determine the best respirator for employees to use based on recognized hazards. Based on the best information presently available regarding the potential hazards to incident investigators, the IAAI-recommended minimum respirator assembly to be used is either a half or full facepiece with P100/OV/AG filters at a minimum. NIOSH rated CBRN Cap 1 canisters can also be used for incident scene examinations when specified by policy, the incident commander or lead incident investigator and used as subcomponents of industrial respirators. In the U.K., based on the information in Health and Safety Executive Guidance 53 the recommendation is the P3 filter and appropriate gas filter.

SCBA (an open circuit, pressure demand, self-contained breathing apparatus respirator) is required by the U.S. and U.K. if it is necessary to enter an IDLH (immediately dangerous to life or health) environment, which includes the post-incident overhaul phase.

Respirator users and competent decision makers should read the relevant literature and information available at the website of the NIOSH National Personal Protective Technology Laboratory (https://www.cdc.gov/niosh/npptl/) regarding respirator approval standards, respirator recognition, and access to the NIOSH certified equipment list when developing procedures to validate a written respiratory protection program based on U.S. Department of Labor, OSHA requirements.

Workplace administrators charged with writing and managing written respiratory protection programs play a vital role in working with management personnel on the use of engineering controls to eliminate the airborne respiratory hazards, and if not able to eliminate them, control them by implementing feasible engineering controls, workplace environmental sampling and monitors, administrative signage/area restrictions and as necessary introducing workplace

specific personal protective technologies and equipment designed to lower the potential or actual exposure of assigned workers.

A field sample of a written industrial respiratory protection program can be found at the following link:
http://www.radford.edu/content/dam/departments/administrative/ehs/Respiratory%20Protection %20Program.pdf .

This is an evolving document that is tailored to a specific workplace and demonstrates a concerted effort to address all the known and implied variables present. It also shows how perishable the information is/can be if the document responsibilities are not revisited, reevaluated, improved, and republished over a known period.

Appendix B – Decontamination Procedures

In addition to cleaning and decontaminating tools after every scene exam use, it is also sometimes necessary to decontaminate (decon) investigative personnel at incident scenes. There are
two types of decon situations that investigators must be aware of:
1. Persons entering the scene who may contaminate it (IN)
2. Persons leaving the scene and are contaminated from the scene contents (OUT)

These recommended procedures or similar should be implemented for the investigation of all fatal incidents, arson incidents and any other investigated scene where dictated by the circumstances of the post-crash scene. The First Responder or lead investigator should determine when these procedures are necessary and implement them accordingly.

IN Procedures
Each person entering each incident scene hot zone must wear new gloves, disposable coveralls or
other approved clean outerwear, and any other necessary pristine PPE. In those instances where the possibility of scene contamination exists, all persons entering the scene should clean their boots, using the below procedures, immediately prior to entering. The lead investigator/scene manager is responsible for determining if this procedure is necessary and, if so, ensuring that the decon station is in place and properly used prior to anyone entering to ensure that all items are either new or fully cleaned to prevent any cross contamination. (If this procedure is used it is to be documented in the investigation report and photographed.)
• If the ground is dry, set up two buckets or similar containers filled with water. To the first bucket add the recommended amount of cleaning solution. Using a poly fiber, long-handle brush or similar, each person cleans their boots in the first bucket, rinses them in the second one, and then enters the scene.
o It will likely be necessary to regularly rinse and refresh one or both buckets.
• If the ground is wet, it may be necessary to place a tarp under these buckets and to add a pre-rinse bucket in the first position. If used, the wet tarp will be slippery, and users need to exercise caution.

OUT Procedures
The decon procedures to be used after exiting a incident scene vary depending on the situation.

At crime scenes, including all fatal incidents, it is strongly recommended that a decon station be established at the hot zone exit point. This process requires the assistance of additional people. While there are specific methodologies for this process in HazMat literature, a detailed discussion of this process is outside the scope of this document.

For all other incident scenes, decon, which includes doffing/de-robing should be done away from the immediate scene and away from your vehicle, in this order:

1. Tools:
a. Wash tools using a bucket of clean water containing the recommended amount of cleaning solution, scrubbing with a poly fiber or similar brush for at least 30 seconds and then rinsing in a bucket of clean water or with a hose, or
b. Wipe them down with a damp cloth* or allow them to air dry; see step 13
c. Properly dispose of the dirty water
2. Remove outer gloves and place in trash bag
3. Take off helmet and wipe it off with a damp cloth*
4. Gently remove hood portion of Tyvek suit**
®
5. Gently unzip the suit and pull out arms. Roll down the suit with the inside out, to the top of boots
6. Remove boots
7. Remove suit and outer gloves and place in a trash bag
8. Clean boots using the same procedures as for tools; see step 13
9. Remove goggles and then respirator, taking care not to cross contaminate facial areas in the removal, and wipe them off with a damp cloth*
10. Remove inner gloves and place in trash bag
11. Close and seal the trash bag
12. Put on any clothing necessary to travel
13. Place tools, boots and trash bag in vehicle's utility area

* If you are going to dispose of these used cloths they go in the trash bag before step 10. If you are going to wash and reuse them, place them in a separate bag that goes in your vehicle's utility area. Follow the best practices cleaning information.

** If wearing something else, such as coveralls, a structural incidentfighting ensemble, or long pants
and a long-sleeved shirt, substitute as appropriate following the same steps.