



LOCKHEED MARTIN SPACE SYSTEMS  
NASA Kennedy Space Center Operations

# SUBCONTRACTOR ENVIRONMENTAL, SAFETY & HEALTH (ESH) HANDBOOK



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## ACRONYMS

<b>IOZ</b>	<b>Industrial Operations Zone</b>
<b>KSC</b>	<b>Kennedy Space Center</b>
<b>ESH</b>	<b>Environmental, Safety and Health</b>
<b>LMSSC</b>	<b>Lockheed Martin Space Systems Company</b>
<b>NFPA</b>	<b>Nation Fire Protection Association</b>
<b>USAF</b>	<b>United States Air Force</b>
<b>FDEP</b>	<b>Florida Department Environmental Protection</b>
<b>OSHA</b>	<b>Occupational Safety and Health Administration</b>
<b>NASA</b>	<b>National Aeronautics Space Administration</b>
<b>POC</b>	<b>Point of Contact</b>
<b>OHF</b>	<b>Occupational Health Facility</b>



#### STATEMENT OF PURPOSE

This document provides direction to all Subcontractors\* working for Lockheed Martin Space Systems Company (LMSSC) at Kennedy Space Center (KSC), Florida.

This document supplements the numerous Federal ((i.e. Occupational Safety and Health Administration (OSHA), National Fire Protection Act (NFPA), etc.), State ((i.e. Florida Department of Environmental Protection (FDEP), etc.) and Local (Kennedy Space Center (KSC), United States Air Force (USAF), etc.) safety and health and environmental laws, regulations and permit requirements incumbent upon LMSSC activities and should not be considered a substitute for those requirements. Subcontractors are at all times required to maintain full compliance with those laws, regulations, and permit requirements applicable to the performance of their work. This includes permits issued directly to NASA/Kennedy Space Center that effect LMSSC. Copies of these permits can be obtained from LMSSC when applicable.

LMSSC Environmental, Safety and Health Department has the authority to immediately shut down any operation which is not compliant with applicable safety and health and environmental laws, regulations and permit requirements or which endangers personnel and/or property. When possible, shutdown would be ordered through LMSSC Administration (herein known as the LMSSC Point of Contact or POC). Under extreme circumstances involving immediate danger to human health, the environment, or flight hardware/critical systems, a shutdown may be made by LMSSC Environmental, Safety and Health personnel without consultation. In addition, any person observing an act or operation that poses an imminent danger to personnel or property can utilize the "stop" command. Immediately after using the "stop" command, notify a supervisor, lead, and LMSSC POC or ESH personnel. Any shutdown of Subcontractor operations due to non-compliance will be at the Subcontractor's expense.

The Subcontractor's prime point of contact for Environmental, Safety and Health matters (except for emergencies) is the LMSSC POC.

\* "Subcontractors", as used in this document, means (1) any individual or legal entity to whom LMSSC awards a contract, and (2) the total contractor organization or a separate entity of it, such as an affiliate, division, or plant that was awarded a contract. Vendor, subcontractor, company, or seller.

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## IMPORTANT TELEPHONE NUMBERS

### EMERGENCY

Fire/Medical/Spills, etc.

911  
(By Center Phone)  
867-7911  
(By Cell Phone)

LMSSC POC	867-8274
KSC Security	867-2121
KSC/Contractor Duty Office	861-5050
KSC Fire Support	867-7627
KSC Fire Department Inspection	867-3491
KSC Occupational Health Facility (OHF)	867-3347
KSC Weather	853-8484
KSC Safety Incident Reporting	867-6551
Hurricane Control Center	867-9200
Hurricane Status Center (Recording)	861-7900
LMSSC <u>Environmental, Safety &amp; Health</u> Occupational Safety & Health	867-8008 or 867-8082
Environmental	867-5051

### GENERAL REQUIREMENTS

All Subcontractor employees shall remain vigilant at all times while on the job site. In addition to rules and regulations presented in this booklet, all Subcontractors are required to comply with applicable OSHA, NFPA, FDEP, EPA, or other applicable Federal, State, or local regulations and the equipment manufacturer's recommended use and operating instructions.

Subcontractors working for LMSSC at Kennedy Space Center (KSC) must adhere to the following general standards of conduct. Violations or lack of timely correction of identified deficiencies will result in removal from the job.

### ENVIRONMENTAL, SAFETY & HEALTH (ESH) PLAN

All Subcontractors working for LMSSC shall provide a job- and site-specific, Environmental, Safety & Health (ESH) Plan. This plan shall include (at a minimum) but not be limited to, contact numbers for on-site and off-site management personnel, person and number responsible for on-site ESH compliance, brief description of work to be performed and schedule/shift information.

### MAXIMUM WORK TIME (MWT)

MWT requirements are intended to ensure that employees do not work excessive hours which can compromise personnel safety: operational safety or mission/construction success. MWT limits apply to all personnel in critical and non-critical positions.

- Prior to any employee working in excess of 12 consecutive hours, concurrence from his/her supervisor who in turn shall obtain approval from LMSSC POC and ESH must be attained.
- Personnel shall not work in excess of 7 consecutive days without at least one full day off.

- Personnel shall not work more than 60 hours during a work week.(7 day period).
- Personnel shall not work more than 2,500 hours during a rolling 12-month period.
- Prior to any employee working in excess of 240 hours during any four consecutive weeks, concurrence from his/her supervisor who in turn shall obtain approval from LMSSC POC and ESH must be attained.

#### SMOKING

Smoking or use of any tobacco products is only allowed in designated areas at KSC and not on LMSSC premises. Smoking is not permitted within 50 feet of areas where flammable/hazardous materials are being stored or used.

#### MEDICAL/FIRST AID

For serious and life-threatening accidents/emergencies, KSC maintains emergency medical services, including the Occupational Health Facility, located West of the O&C on the corner of Second Street and C Avenue in the KSC Industrial Area. Emergency medical assistance can be obtained by dialing 911 on internal KSC phones or by cell phone at 867-7911 (KSC Emergency Services).

Off-shift medical care requirements are handled through KSC Emergency Medical Services, which are to be dispatched through the Center-wide 911 system. If non-urgent medical attention is required, the patient may elect to go to a local hospital or other facility (i.e. Fire Station or KSC Visitors Center) to receive medical attention, or may elect to report to the KSC Medical Facility (OHF) the next day. All injuries need to be reported as soon as possible to your Supervisor and to the LMSSC POC.

Accidents involving blood or Other Potentially Infectious Materials (OPIMs) must be cleaned up by personnel trained in

exposure control methods. Contact LMSSC ESH to arrange for cleanup of accident areas where blood or OPIMs are present.

Subcontractor employees working in areas where chemicals are being used must have access to eyewash and/or shower facilities. The Subcontractor shall ensure that their employees are aware of the closest facility eyewash/shower location. This station shall be less than 10 seconds away from work area and the path to the station shall be clear. If an eyewash station or shower is not immediately accessible for emergency use within the work area, the Subcontractor shall provide temporary stations as necessary.

#### WORK SITE CONTROL

Subcontractors shall coordinate their efforts on a non-interference basis with LMSSC activities. Control of specific work areas (including placement of appropriate signs and barricades) shall be the responsibility of the Subcontractor and shall be acceptable to NASA-KSC, LMSSC and other NASA prime contractors. The Subcontractor is responsible for providing work plans/schedules (including definition of the means to be used to control Subcontractor work areas) to LMSSC for inclusion into master schedules.

#### Definition of Operations

Critical Operations shall include, but limited to the following:

- Any critical lift (lift of flight hardware or lifting over flight hardware)
- Propellant transfer operations
- High Pressure Gas operations
- Vehicle or vehicle component pressurization
- Personnel entry into tanks or vehicle
- Ordnance installation
- Ordnance checkout and electrical connect/disconnect
- Vehicle erection
- Vehicle de-erection

- High acoustic energy level activities
- Structural, material stress or strength tests
- Initial gaseous pressurization and evacuation/venting of vehicle propellant tanks/pressure vessels/GN2 flows
- Operations involving high voltage or ionizing radiation (X-Rays, range of high frequency high energy electromagnetic waves)
- Contractor/Site Activation work (construction)
- Cryogenic operations (cold flows & transfers)  
Contractor/Site Deactivation Work
- RF Testing
- Electrical testing (on flight hardware, ground support equipment, tooling, etc.)
- Battery handling  
(activation/charging/installation/testing)
- Hazardous material/waste shipments/handling
- Etc.

Non-critical operations shall include all operations that are not considered critical or otherwise..

#### OPERATIONAL CLEARS (HAZARDOUS OPERATIONS)

Due to the nature of some activities at KSC, there will be times when work areas will be inaccessible due to hazardous operations. While this includes launch days, there are also several pre-operational and preparatory activities that require downwind (or radius) clears to prevent potential exposure to toxic propellants or blast areas.

Staying in touch with the LMSSC POC will help keep you informed of these operational clears, many of which are planned well in advance. However, sometimes hazardous operations and resulting clears cannot be accurately predicted in advance since they depend on factors such as weather conditions (wind direction/speed, atmospheric inversion, etc.) and integration into the master schedule. In these cases, work

interruptions may be imposed with very little notice and Subcontractors should maintain awareness of activities going on around them so that their work areas are readily securable in the event of these situations.

On occasion, Subcontractor activities may also require coordination and clear zones. Work such as X-ray inspection, high pressure operations, certain electrical operations, etc. rely on timely notification and integration of these activities into the schedule. Additional safety and/or security arrangements may be necessary to accommodate these activities and as much notice as possible should be given by the Subcontractor.

#### Quiet Hours

The O&C also serves as the primary sleeping quarters for the Astronauts and certain periods of time prior to launch and landing require no "loud noises" to be made within the Industrial Operations Zone (IOZ). These times are announced several weeks in advance of a launch/landing and shall be strictly adhered too. Operations taking place during this period shall be approved by LMSSC POC prior starting the work.

#### HOUSEKEEPING

All Subcontractor work areas shall be maintained in an orderly manner, with housekeeping being an on-going task, completed as the work progresses. At no time shall the Subcontractor block exit pathways, emergency egress routes, pathways or roadways from buildings/work areas without prior coordination with LMSSC and ESH. In addition, areas marked on the floor or by other visual barriers shall be strictly adhered to in accordance to the IOZ 6S Implementation Plan. No storage of placing of other material in these designated areas is permitted unless specifically authorized by the IOZ 6S Implementation Plan and LMSSC ESH.

#### SITING TEMPORARY FACILITIES/EQUIPMENT/UTILITIES

Prior to establishing temporary lay down areas, mobilization of project trailers, or establishment of temporary utility services (power, communications, water/sewer, etc.), proper notification must be provided and approval must be obtained through LMSSC POC, NASA-KSC, and other NASA prime contractors.. Contact LMSSC POC with details of the proposed action(s) to determine applicable requirements.

#### RECORDKEEPING AND REPORTING

Retention of records/documents (including certifications, etc.) required by applicable Federal, State and local requirements are the responsibility of the Subcontractor and shall be made available to LMSSC for inspection and submittal upon request.

#### WEATHER HAZARDS

There are two types of lightning watches/warnings.

A Phase I Lightning Watch is issued to provide advance warning of the approach of lightning-producing storms. They are typically issued 30 minutes prior to the arrival of lightning. During a Phase I Lightning Watch "Critical Operations" within the IOZ Building (inside the building envelop) on-going work can continue as planned. Depending on the work area, different actions are required during Phase I Lightning Watches. For areas outside the IOZ, personnel shall make necessary preparations to seek shelter if a Phase II Lightning Warning is announced.

A Phase II Lightning Warning is issued when lightning is imminent or occurring in the 5 nautical mile boundary of the specified lightning alert area. If warranted, Phase II Lightning Warnings may be issued by the NASA KSC/Weather Squadron without issuance of a Phase I Lightning Watch. Generally speaking, all personnel shall seek shelter upon issuance of a Phase II Lightning Warning. No critical operation can begin during a Phase II Lightning Warning. If a critical

operation has not yet begun while in a Phase I Lightning Watch, NASA KSC/Weather (853-8484) shall be contacted to determine if a Phase II Lightning Warning is predicted in the foreseeable future. If a Phase II Lightning Warning is predicted to occur within the period of time it would take to complete the critical operation then starting the operation is prohibited. If a Phase II Lightning Warning is announced during a critical operation then the operation shall be taken to the next safest stopping point and held until the Phase II Warning is terminated and is not predicted to reoccur until the proposed critical operation can be completed. LMSSC Systems Safety and ESH shall approve all operations that can occur during a Phase II Lightning Warning.

Other weather watches and warnings are useful in preventing personnel exposure to hazardous weather situations such as high winds, hail, and tornadoes. Subcontractor personnel should remain aware of the weather conditions in their work areas and respond to aural warnings as they are issued.

#### HURRICANE REQUIREMENTS

During hurricane season, Subcontractors are responsible for hurricane preparations in their work areas; these preparations taking precedence over all other work 48 hours prior to projected landfall of a hurricane (Hurricane Condition [HURCON] III). See the current revision of LMSSC Emergency Preparedness Plan (i.e. Hurricane Plan is embedded within this Plan) for details of Subcontractor responsibilities.

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#### GENERAL (CONTINGENCY) REQUIREMENTS

Sometimes, despite all the safety, health and environmental precautions taken to prevent incidents and accidents from happening, things go wrong. In the event "things go wrong" (e.g., spill of hazardous materials, including fuels, chemicals, etc., injury to personnel or damage to flight hardware, ground support equipment, or other systems, or even simply an "out of the ordinary" circumstance that could lead to potentially hazardous situations), immediately safe the work area and contact LMSSC POC and ESH. Ensure the incident scene is not disturbed. All injuries occurring while performing contracted work on or at the work site shall be reported immediately to LMSSC POC and ESH. If it is not possible to safe the area without endangering workers or those around the area, immediately evacuate the area and contact emergency authorities (911 or 867-7911) and LMSSC POC and ESH.

#### EMERGENCY NOTIFICATION AND RESPONSE

- Facility Fire Alarms consist of loud, continuous bells and ringing as well as a visible strobe. When you hear or see the facility fire alarm, evacuate to the closest exit and report to your marshalling area, 200 feet upwind from the facility.
- Area Warnings consist of a warbler sound and indicate there is danger in the area. When you hear an area warning, evacuate the area and report to the marshalling area.
- Tornado Warnings are a 3 to 5 minute steady siren to warn those outside to seek shelter immediately in a substantial building. Corridors in the interior hallways offer the best protection. Stay clear of exterior windows.
- The Emergency Alert System (EAS) is a buzzer-type noise on television or radio. All personnel shall listen and follow emergency instructions.

- The Public Address System (PA) is used to announce general information, weather advisories, toxic releases and or other emergencies.

#### EMERGENCY INFORMATION

- Flashing Lights in facilities indicate a hazardous condition or at least one which indicates caution shall be taken.
- A flashing amber light indicates that hazardous operations are underway. Only personnel essential to the operation should be present. Do not enter.
- A red flashing light indicates an emergency situation or area that shall not be entered.
- A blue flashing light indicates that radio frequency (RF) waves are being transmitted and non-essential personnel should not approach.
- A white flashing strobe on the Fire Alarm indicates an emergency situation requiring all personnel to immediately evacuate the facility.

#### FIRE/EXPLOSION

Means of egress shall be continuously maintained free of all obstructions or impediments to full instant use in the case of fire or other emergency at all times during construction activities. No equipment, furnishings, decorations, or other objects shall obstruct exits, pathway to emergency exits, or block visibility thereof to an emergency exit. Any door, passage, or stairway that is neither an exit nor a way of exit access shall be posted as "NO EXIT" or "NOT AN EXIT".

In the event of a fire or explosion in/near a Subcontractor work area, all personnel should evacuate the hazardous area, providing notification to all other personnel in the area, as appropriate (e.g., verbal, pulling fire alarm, sounding audible signal, etc.). Always use the stairs when evacuating, never utilize the elevators.

After evacuation to a safe location contact the NASA-KSC Fire Department at 911 on internal KSC phones or by cell phone at 867-0911 and provide details of the incident. After the emergency notification is made, immediately contact the LMSSC POC.

A written report, providing details of the incident, must be submitted to the LMSSC POC within 24 hours. The report should include details including the nature and severity of the incident, witnesses, cause(s), if known, and corrective actions taken/planned.

#### SPILL REPORTING/RESPONSE (INCLUDES "NEAR MISSES")

Subcontractors shall immediately report all releases of hazardous materials or wastes to the LMSSC POC and to ESH. For releases which can be cleaned up by Subcontractor personnel (within their capability and training), LMSSC ESH may direct the Subcontractor to complete the cleanup. At the time of notification, the Subcontractor shall provide the following information:

- This is an Emergency Spill
- Your name and phone number
- Extent of injuries, fire or explosion
- Specific location of spill
- Name of the substance released
- Quantity released in volume (gallon), or surface area covered
- Is spill contained?
- Worst case credible quantity of material that could be released
- Potential risk to human health or the environment, if known
- Cause of the incident (if known)
- Cleanup actions underway

In the event that the hazardous material release exceeds the capability and training of the work crew (e.g., over 5 gallons of liquid, any amount of mercury, any amount of hypergolic propellants), all personnel should clear the area in the vicinity of the release. The Subcontractor should alert all personnel around the area of the occurrence and, if possible, keep the area clear until the designated emergency response team arrives. All personnel should avoid contact with or breathing the released materials.

A written report, providing details of the incident, must be submitted to the LMSSC POC within 24 hours. The report should include details including the nature and severity of the incident, witnesses, cause(s), if known, and corrective actions taken.

#### WORKPLACE VIOLENCE

Physical acts of violence, threats, harassment, intimidation or other disruptive behavior is strictly prohibited on LMSSC or KSC premises. Persons engaging in such activity will be removed from the premises and may be subject to disciplinary action and criminal penalties. Report all incidences of this type of behavior by calling 911 (867-7911 on a cell phone) for emergency scenarios or 867-2121 for non-emergency scenarios as well as LMSSC POC. If you witness this type of behavior, do not attempt to handle it yourself. Avoid confrontation and call for help.

#### ACCIDENT/ILLNESS/INJURY REPORTING (INCLUDES "NEAR MISSES")

In the event of an accident, injury or occupational illness related to a Subcontractor's work activity, the Subcontractor shall immediately secure the accident/injury scene and notify the LMSSC POC and ESH. This reporting also includes "near miss" incidents, which are defined as unintended events which had the potential to cause personal injury, adverse impact to

the environment, or significant damage or loss to product, hardware, ancillary equipment, or facility but did not.

A written report, providing details of the incident, must be submitted to the LMSSC POC within 24 hours. The report should include details including the nature and severity of the incident, witnesses, cause(s), if known, and corrective actions taken/planned.

#### LOCATION-SPECIFIC REQUIREMENTS

Certain locations at KSC are designated as "restricted" or "controlled" due to security requirements, hazards associated with the area(s), etc. Examples of "restricted" or "controlled" areas include:

- Operations and Checkout (O&C) Facility
- Launch Complexes (LC) 39A, 39B, (KSC)
- Vehicle Assembly Building (VAB)
- Space Station Processing Building (SSPF)
- Orbiter Processing Facility (OPF)

In order to work in these locations, certain additional requirements may apply. Attached to this handbook are fact sheets for the Operations and Checkout Building.

#### SITE-SPECIFIC SAFETY BRIEFING

Due to the unique hazards present in many areas of KSC, LMSSC ESH will conduct Pre-Work Briefings to educate Subcontractor personnel. The Pre-Work Briefing will be mandatory for work conducted at the O&C or other areas at the discretion of LMSSC. Details of the briefing will include:

- Locations of propellant storage areas, their hazards and characteristics;
- Propellant area entry requirements (if applicable);
- Evacuation routes/emergency procedures;

- Aural Warning system, sirens, status lights;
- Fire alarms and evacuation routes/procedures;
- Meteorological warnings/procedures;
- Contact names/numbers;
- Control of work areas;
- Locations of smoking areas, rest rooms, water fountains;  
and
- PPE/equipment requirements.

All attendees at the Pre-Work Briefing will be required to sign an attendance roster. The Subcontractor will be responsible for ensuring that briefings are obtained and understood by any additional personnel arriving at the work site after the initial Pre-Work Briefing and providing documentation of this training to LMSSC POC upon request.

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#### LOCATION-SPECIFIC (CONTINGENT) REQUIREMENTS

Subcontractors required to work on or near work stations while flight hardware is present may also be subject to additional requirements. Specific requirements will be detailed in the contract documents. However, there are some general requirements that Subcontractors must be aware of.

#### WORK IN THE VICINITY OF FLIGHT HARDWARE OR GROUND SUPPORT EQUIPMENT (GSE)

Of particular concern is Subcontractor work in close proximity to flight hardware. The potential for damage to the vehicle and/or catastrophic damage/injuries associated with an accident involving flight hardware makes it necessary to impose specific restrictions and requirements on Subcontractors.

Subcontractor efforts within a 25-foot radius of flight hardware shall be subject to the requirements outlined below:

Work within 10 feet of flight hardware- The Subcontractor shall provide a Flight Hardware/Vehicle Protection Plan for review and prior approval by LMSSCC which details protective measures to be taken (such as tool tethering). Means of controlling electrical power and pneumatic pressure systems (including required interruptions in service) shall be described in detail in the plan. Work within clean room areas will require Subcontractor personnel to wear appropriate protective clothing, as directed.

Welding or flame cutting within 50 feet of flight hardware - Welding or flame cutting within a 50-foot radius of flight hardware requires prior LMSSCC approval. The Subcontractor shall provide a Flight Hardware/Vehicle Protection Plan which details the work to be conducted, protective measures to be taken (i.e., barriers), tool tethering, etc. The Subcontractor shall provide a Flight Hardware/Vehicle Protection Plan for review and approval by LMSSCC which details protective

measures to be taken (such as spatter shielding, use of fire-resistant materials, etc.) as well as obtaining appropriate burn permit from KSC Fire Department.

#### TASK-SPECIFIC REQUIREMENTS

When conducting work outlined below, the following requirements shall apply to Subcontractor efforts.

#### HAZARDOUS CHEMICALS (HAZARDOUS COMMUNICATION (HAZCOM))

Subcontractors using chemicals during performance of their work shall provide a list of such chemicals as well as copies of ALL material safety data sheets (MSDSs) for each chemical/product prior to use. In addition, storage locations for chemicals used in work areas shall also be described, including details such as storage locker capacity, grounding capability, containment around storage areas, etc. This information must be provided to (and approved by) the LMSSC POC prior to the start of work.

LMSSC also maintains a comprehensive computerized database of MSDSs for chemicals/products present in our work areas. Materials furnished by LMSSC will be accompanied by a copy of the MSDS (usually contained in your contract documents). In addition, if your work involves activities within the Launch Complexes or other restricted areas, as part of the pre-work briefing you will be advised of the presence, warning characteristics, and emergency procedures relevant to each of the propellants located there.

Additional requests for specific chemical information should be coordinated through the LMSSC POC and ESH.

#### HAZARDOUS MATERIALS (RESTRICTED CHEMICALS)

LMSSC restricts the use of certain chemicals due to extreme toxicity (e.g., confirmed human carcinogens, environmental



persistence) and/or regulatory restrictions (e.g., ozone-depleting substances). Use of these "restricted" chemicals is subject to approval by LMSSC or is prohibited completely.

Examples of completely restricted chemicals include:

- Arsenic
- Asbestos
- Benzene
- Carbon Tetrachloride
- Ethylene Oxide
- 1,1,1 Trichloroethane
- Hydrogen Cyanide
- Nickel Carbonyl
- PCBs
- Soots/Tars
- Trichloroethylene
- Vinyl Chloride
- Perchloroethylene
- Zinc Chromate (as Cr)

Partially-restricted chemicals (subject to LMSSC approval prior to use) include:

- Acetone
- Benzo(a)pyrene
- Cadmium Compounds
- Chloroform
- Chromium (VI) Compound
- Formaldehyde
- Hydrazine
- Isopropyl Alcohol
- Lead
- Methylene Chloride
- Methyl Ethyl Ketone
- Methyl Hydrazine
- Methyl Isobutyl Ketone
- Nickel Compounds
- Toluene
- Trichlorotrifluoroethane

LMSSC will review the chemical list/MSDSs submitted by the Subcontractor, prior to commencement of work, and will advise the Subcontractor of any products that contain "restricted" ingredients. If suitable substitutes cannot be identified, limited use of these chemicals may be authorized by LMSSC for specific tasks.

#### WASTE HANDLING

Subcontractors are responsible for managing all waste in accordance with all Federal, State and local rules as well as applicable LMSSC and NASA KSC requirements specifically the

most current KNPR 8500.1. Generation/disposal of all wastes shall be accomplished in coordination with LMSSC, through the NASA KSC Waste Management System which includes providing a waste generation forecast prior to the start of work (to ensure adequate storage facilities, management practices, generation rates and waste identification, availability of containers, etc.).

Subcontractor personnel involved in the generation of hazardous wastes shall be trained as required by the EPA/FDEP, with evidence of this training provided to LMSSC upon request. Unless indicated otherwise in the contractual documentation, LMSSC shall provide compatible, DOT-compliant containers for all wastes generated during the course of Subcontractor work. Labels will also be provided by LMSSC ESH.

Waste shall only be stored in LMSSC-approved locations in pre-determined maximum quantities. The Subcontractor Waste Forecast (mentioned earlier) should describe the proposed waste streams and storage areas. Subcontractors shall be responsible for transporting waste generated in the work areas to designated storage locations within the IOZ as specified by LMSSC ESH.

#### LOCKOUT/TAGOUT

Prior to initiation of work involving energy sources, the Subcontractor shall provide a copy of their lockout/tagout program to LMSSC describing procedures and methods of compliance with applicable requirements. This plan and LOTO process shall specifically incorporate the use of the Danger/Do Not Operate-Lockout Tag KSC 20-195 and the Danger Do Not Operate Tag KSC 20-165 as well as KSC Colored coded locks (i.e. yellow) used to support these operations. These tags can be obtained through the LMSSC POC and ESH. The locks shall be supplied by the Subcontractor.

A mandatory pre-work briefing with all "affected" and "authorized parties" shall be conducted to prevent injuries/damage due to unexpected startup, energization or release of energy from the machine or facility service being worked on. , All potentially affected/authorized parties shall participate in locking/tagging out of the energy source prior to performing any work on the subject equipment/facility related item.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Subcontractor employees are required to use personal protective equipment (PPE) where required by OSHA regulation, work performed, location, etc. Subcontractors shall ensure that their employees are medically certified to wear PPE, properly trained, in the selection, care and use of the PPE, and fit tested with the specific piece of PPE when required and that they are equipped with the proper PPE in adequate working order. NOTE: Required training records shall be made available upon request to LMSSC. The Subcontractor shall also monitor compliance as necessary. Types of PPE include:

- Safety glasses with side shields (ANSI Standard Z87.1);
- Hearing protection (ear plugs);
- Foot protection (ANSI Standard Z41.1);
- Respiratory protection (respirator, self-contained breathing apparatus, etc.);
- Head protection (ANSI Standard Z89.1 1986 or Z89.1 1997 Revised); or
- Fall protection (full body harnesses).

When respiratory protection is to be used, the Subcontractor shall have a written LMSSC approved Respiratory Protection Program, compliant with all OSHA requirements. In addition, respirator fit checks are required for all personnel who will be using such equipment. Records, including the Respiratory Protection Plan and applicable training/respirator fit checks and

medical records shall be maintained by the Subcontractor and are subject to LMSSC review.

Subcontractors performing work in areas with a potential fall hazard of four feet or greater are required to provide adequate fall protection, compliant with OSHA and NASA KSC requirements.

#### ELECTRICAL SAFETY

When used on construction sites, all 120 volt, single phase 15- or 20-amp receptacle outlets, temporary wiring and flexible (extension) cords on site must be protected by a ground fault circuit interrupter (GFCI).

When extension cords are used as temporary power they shall be grounded, medium to heavy duty construction, UL listed, and of sufficient length to prevent piggy backing. Damaged cords present both a fire and electric shock hazard. Immediately discard any cord that is damaged or feels hot to the touch. Never repair a damage cord. Cords used outdoors or in damp areas must be designated for outdoor use, and shall be connected to an outlet that is protected by a Ground Fault Circuit Interrupter (GFCI).

#### LADDER SAFETY

Stepladders higher than 20 feet shall not be used. Portable, straight, and extension ladders shall be equipped with non-slip bases and shall be no higher than 30 feet, fully extended.

Portable metal ladders shall be legibly marked with signs reading "Caution—Do Not Use Around Electrical Equipment," or equivalent wording on each of the two support beams.

All ladders shall be marked with the Manufacturer's Name, designed working load, and name of company owning the ladder.

Defective ladders shall not be used and must immediately be removed from service.

When using all ladders, place the ladder on solid footing to prevent the ladder from sinking or tilting, and ensure that the ladder feet are not placed on moveable objects, but on a substantial and level base.

When using straight or extension ladders:

- Place them so the horizontal distance from the base to the vertical plane of the support is approximately one-fourth the ladder length between supports. (For example, place a 12-foot ladder so that the bottom is three feet away from the object against which the top is leaning.)
- Place them so both side rails have secure contact.
- Secure them at the highest point and physically anchor them to a structure/building/device.
- Exception: Anchoring is not required when another employee holds the ladder to steady it.

When ascending or descending a ladder, ladder users shall:

- Always face the ladder when ascending or descending.
- Do not have muddy, greasy, or wet shoes that could cause slipping when climbing.
- Ensure that both hands are free and one hand is on the ladder at all times when climbing or descending. Materials shall be pulled up by rope.
- Use the Three Point Rule when on a ladder; e.g., one hand + two feet = three points.

In addition to proper selection and usage, these prohibitions shall also be followed:

- Do not use ladders as a scaffold or runway.
- Do not place ladders in front of a door, unless the door is locked or blocked open or otherwise guarded.
- Do not place ladders against a window pane or sash. Securely fasten a board (not with nails) across the top of the ladder to give a bearing at each side of the window.
- Do not lean ladders against an unsafe backing, i.e., loose boxes, barrels, or round objects.

- Do not use metal ladders on electrical work.
- Do not slide down ladders.
- Do not climb higher than the third rung from the top of a straight ladder.
- Do not climb higher than the second rung from the top of a stepladder.
- Do not splice short ladders together.
- Do not use ladders on elevated work platforms, bridge cranes, scaffolds, etc.

### ASBESTOS

Many of the facilities at KSC were built over 30 years ago and/or contain heat/flame resistant materials that contain asbestos. Some of the materials that may contain asbestos include pipe insulation, floor tile/mastic, wall paneling, gaskets, valve and stem packing's, wire sheathing, etc.

In many areas, stickers or clearly identified markings have been placed on materials that have been sampled and analyzed by the NASA KSC Environmental Health Contractor. LMSSC maintains a collection of analytical reports for the various areas of KSC and may be able to provide information pertaining to the presence of asbestos-containing material (ACM) in your work area. **IF IN DOUBT, always assume the material is ACM, call the LMSSC POC and ESH and DO NOT DISTURB!**

When disturbance of ACM is necessary, the Subcontractor shall provide a detailed Abatement Plan to LMSSC outlining the area(s) to be disturbed, control/removal techniques to be employed, certified Asbestos Abatement Contractor to be used, all applicable certifications for contractor and their employees, reporting requirements to be performed prior to requesting permission to start abatement work, etc. to ensure that friable asbestos is not released from the work area. This plan shall be provided to and approved by LMSSC prior to commencement of the activity. Notifications for asbestos abatement shall be made through the LMSSC POC. Time shall

be allotted between submittal of notification to LMSSC, and work start, since all notifications to the outside agencies must be performed by appropriate KSC personnel.

#### REMOVAL OF HAZARDOUS COATINGS (LEAD/CADMIUM/CHROMIUM/PCBs)

As with asbestos, several varying types of structures/coatings at KSC contain hazardous constituents (including lead, cadmium, chromium, mercury and even PCBs in paint) due to their age. Generally stated, all coated surfaces in LMSSC-controlled work areas shall be assumed to contain at a minimum lead and chromium (in some cases, LMSSC may have data to the contrary, but generally, this is true). Since protective clothing requirements and operational practices prescribed by the lead and chromium construction standard are similar and sufficient for the other contaminants, only lead and chromium are specifically discussed here.

Where work involves disturbing these coatings (blasting/scraping/grinding/welding/cutting, etc.), LMSSC ESH will attempt to provide coating content information specific to the work area. In the absence of this information (as stated earlier), coatings shall be presumed to contain lead/chromium with appropriate operational constraints and PPE used as necessary.

Prior to starting work, a Hazardous Coating Abatement Plan shall be submitted for LMSSC review and approval detailing methods (e.g., blast media/coating removal method, PPE, waste management, etc.), training and certifications for contractor and employees and affected personnel to accomplish work on coated areas.

#### WORKING IN CONFINED SPACES

The Subcontractor shall be responsible for ensuring that their employees requested to work in confined spaces have the appropriate training, certifications and expertise to accomplish

the work. Monitoring methods shall be provided to LMSSC for review prior to entry. A KSC Confined Space entry Permit [KSC Form 16-287, See Appendix 1] and LMSSC ESH approval must be obtained prior to starting or entering any confined space. Notification to appropriate NASA KSC Emergency Services for Confined Space Entry support will be coordinated through the LMSSC POC in a timely manner.

#### USE OF POWDER-ACTUATED TOOLS

LMSSC ESH approval must be obtained prior to using any powder-actuated tools at KSC. Proper training records for personnel utilize these tools must be maintained and made available on site. In addition, the Powder Actuated Tool must be marked with the manufacturer's name and design specifications. If the tool is going to be left on-site it needs to be secured (LOCKED) in an appropriate container. All spent powder shells and unused/unwanted shells shall be retained and provided to LMSSC ESH for proper disposal.

#### USE OF RADIATION DEVICES

Ionizing Radiation (which includes radioactive sources and radiation devices) and Nonionizing Radiation (such as hazardous levels of Radio Frequency (RF) radiation, lasers, and optical devices) require KSC usage permits which must be obtained through LMSSC POC and ESH. LMSSC ESH approval must be obtained prior to bringing a source of radiation onto KSC. When conducting work requiring the use of such equipment, every attempt should be made to coordinate the activity during off-shift hours to minimize disruptions to operations.

#### USE OF LASERS

LMSSC ESH approval must be obtained prior to bringing lasers onto KSC. When conducting work requiring the use of such equipment, every attempt should be made to coordinate the activity during off-shift hours to minimize disruptions to operations.



#### USE OF HEAT-PRODUCING DEVICES

Prior to using a heat-producing device at KSC, Subcontractors must obtain a Heat-Producing Device Use Permit from LMSSC. A heat-producing device is defined as a device which produces a temperature of 228 degrees Fahrenheit (or higher) without flame. Examples of heat-producing devices include: heat shrink/electrical/Ray-chem guns, soldering guns, forced air blowers and electric wire strippers.

Applications for use of heat-producing devices at KSC may be obtained by contacting LMSSC. Prior to issuance of the permit, LMSSC must be given the opportunity to visually inspect the device to be used. Upon inspection of the device, a LMSSC ESH Engineer will sign the permit, thereby making it valid for the activity/duration specified on the permit.

#### HOT WORK (BURN) PERMITS

Prior to using a flame or spark producing device at KSC, Subcontractors must obtain a Burn/Flame Permit (KSC-2-13, See Appendix 2) by completing the applicable portions of the KSC Permit and submitting it 24 hours in advance of operation to the LMSSC POC and ESH. The Subcontractor shall at a minimum comply with all requirements listed on the Permit, including providing the appropriate fire extinguisher, fire blankets, and fire watch during and 30 minutes after operations in the work area. In certain areas, the fire detection/suppression systems will require deactivation prior to using a heat or burn generating device. Deactivation of these systems shall be coordinated through LMSSC POC/ESH and the KSC Fire Department. Reactivation of these systems must be performed as soon as possible after the use of the device is completed. Typical flame/spark-producing devices are those used to cut or weld metal (e.g., torches, welders, cut-off saws, side grinders, etc.).

When a Burn/Flame Permit is issued, the Subcontractor must post it at or near the work location until the work is

completed, inspect the work area prior to commencement of work to ensure that all flammable/combustible materials are removed/protected and ensure a fire watch remains in the work area throughout the operation. A copy of the permit shall be provided to the LMSSC POC.

#### USE OF EXPLOSIVES

No explosive material may be brought onto KSC without prior approval from LMSSC ESH and KSC NASA Ordnance.

#### CRANE/LIFTING EQUIPMENT USE

Approved third party independent crane inspection certifications shall be provided to LMSSC prior to start of work (use of crane). Only trained operators shall operate cranes and other lifting devices (i.e. Powered Industrial Trucks, Lift-all, etc.). Verification of required training/certifications shall be provided to the LMSSC POC prior to commencement of crane and or lifting device operation. Mobil Cranes shall be Load Tested prior to beginning the crane operation and proof tested as required ((annually if used to lift flight hardware or critical one of kind equipment) and (once every four years for all other equipment)). IOZ Facility Cranes follow the same schedule but do not require a load test prior to each operation. with documentation submitted for LMSSC POC/ESH review and approval.

To ensure safe operations, LMSSC requires lifting plans detailing work to be performed. Details of the rigging to be employed, certifications of required proof testing (including all slings, shackles and other rigging in the load path), etc. shall be contained in the plan.

Work under suspended loads is prohibited at all times.

#### PERSONNEL AERIAL LIFTING DEVICES

Elevating work platforms and aerial devices shall be inspected, serviced, and adjusted according to the manufacturer's

requirements prior to being placed into service at the worksite. Certifications for each device (maintenance, inspection records, load tests, etc.) shall be provided to LMSSC POC and ESH prior to place these devices into service at the worksite.

Only qualified operators shall operate elevating work platforms and aerial devices. Elevating work platforms and aerial devices shall be assembled, used, and disassembled in accordance with instructions from the manufacturers and the operating procedures provided in this section. In general, elevating work platforms and aerial devices are not insulated for use near electrically energized circuits and overhead lines. Therefore, when this type of service is necessary, special work limitations, procedures, and specific safeguarding instructions shall be developed. LMSSC POC and ESH approval of these procedures shall be obtained prior to the use of elevating work platforms and aerial devices in these situations. The following limitations shall be specifically addressed:

- Maintain a minimum distance of 10 feet from a machine to energized circuits and overhead lines. The distance is measured from the nearest point of the platform to all overhead power transmissions lines, conductors, and insulators of 50,000 volts or less.
- Obtain ESH approval before operating any machines near power transmission lines, conductors, or insulators that are greater than 50 KV.
- Do not position machines, regardless of distance, in a manner where a free descent event could bring any part of the machine into contact with the power transmission conductor or insulator.

Qualified operators shall abide by the following requirements:

- Perform pre-start inspections as required by the manufacturer's recommendations.
- Review the operational area for hazards prior to initiating operations.
- Do not exceed the manufacturer's load limits.

- Ensure that the load distribution on the platform is in accordance with the manufacturer's recommendations.
- Use outriggers and stabilizers in accordance with the manufacturer's recommendations.
- Verify that all gates are closed and that guardrails, chains, etc., are installed and properly closed and latched prior to operation.
- Use manufacturer-approved hard-points for personnel safety restraint. Guardrails and mid-rails shall not be used as tie-off points for personnel safety restraint.
- Face the direction of movement at all times. When conditions obscure the operator's view, a spotter shall be designated to direct the operator.
- Ensure that the area surrounding the work platform is cordoned off and signage is placed at all approaching pathways to warn pedestrians of overhead work hazards.
- Verify that the area below and adjacent to the platform is clear before lowering the platform.
- Never use ladders, scaffolding, planks, or other devices that are not approved by the manufacturer as a modification for extending the height of the work platform.
- Do not stand, sit, or climb on the guardrails, cage, or basket.
- Charge batteries at prescribed recharging station/locations.
- Shut engines down during refueling operations.
- Use personal safety restraint devices as required by the manufacturer's placards, warnings, and operating and safety manuals.
- Do not tie off a lanyard or other fall-arrest equipment to an adjacent pole, guardrail, structure, or equipment while working from an elevating work platform or aerial device.

- Work platforms shall not be used on an inclined surface unless such use is recommended by the manufacturer.

#### AIR POLLUTION SOURCES

Subcontractor activities that involve generation of air emissions (combustion of fuels, spray painting, etc.) must be coordinated with and approved by LMSSC POC/ESH.

#### TEMPORARY LIGHT USE (NIGHT WORK)

If the project work schedule requires working with artificial lighting at any time during the year, but especially during sea turtle nesting season (May 1 through October 31), Subcontractors are required to provide a Light Management Plan for LMSSC approval. This plan must outline steps to be taken to prevent disorientation of turtle hatchlings. Lighting that is visible from the coast must be properly shielded to prevent illumination of the beach.

#### WATER DISCHARGES (INCLUDING STORMWATER/EROSION CONTROL AND DEWATERING)

Subcontractors may not dispose of waste chemicals by pouring them into facility drains or onto the ground. Industrial wastewater discharges shall be coordinated with LMSSC POC/ESH and appropriate permitting/approvals shall be in place prior to discharge.

Best management practices should be employed by Subcontractors during performance of work for LMSSC. Examples of best management practices include prevention of contamination of soil, groundwater and surface water by covering material storage piles, providing containment around fuel storage tanks, drums, etc. (including proper management of rainwater collected in the secondary containment systems) and using drip pans under equipment that leaks (or may leak). Other practices may include providing and maintaining erosion

control structures to prevent siltation of drainage structures or offsite discharges in violation of State and Federal laws.

Dewatering for construction is not authorized without express written approval from LMSSC POC/ESH. This approval may be obtained based on a review of Subcontractor-supplied information such as location of the dewatering effort, testing of water for contaminants (i.e. O&C is located on a Solid Waste Management Unit (SWMU) with known groundwater contaminants, approval of this activity must be obtained from the KSC Environmental Program Branch and applicable environmental agencies prior to start) discharge capacity of the pumping system, quantity and rate of discharge, location of dewatering outfall, erosion controls to be employed, etc.. Unless otherwise specified, permitting of dewatering systems shall be the responsibility of the Subcontractor, in coordination with LMSSC POC/ESH.

#### LAND CLEARING/GRUBBING

No clearing shall be performed by a Subcontractor without express written consent from LMSSC POC/ESH. Further, no clearing/grubbing in wetland areas shall be conducted by the Subcontractor without authorization, including necessary permits. Disposal of cleared material shall be coordinated with LMSSC POC/ESH.

#### POLYCHLORINATED BIPHENYLS (PCBs)

No PCB-containing materials are allowed to be used to complete Subcontractor work activities. Removal of electrical equipment and other material (i.e., transformers, light ballasts, certain materials with PCB coatings, etc.) shall be coordinated with and approved by LMSSC POC/ESH prior to commencement of that activity.

#### EXCAVATION PERMITS

KSC maintains a permitting system for excavation work. Prior to commencement, the Subcontractor shall provide LMSSC

POC/ESH with information required to complete KSC Form 26-312. A completed KSC Excavation Permit application (KSC Form 26-312, See Appendix 3) will be forwarded to the NASA KSC Duty Officer by LMSSC ESH. Upon receipt of the Excavation Permit, scheduling/completion of all utility locates shall be the responsibility of the Subcontractor. This Permit shall be maintained at or near the site of excavation until the excavation work is completed.

The Subcontractor is responsible to ensure that no excavation occurs on designated "No Dig Days". Daily contact with the Cape Support office (853-5211) is required to ensure that this information is obtained. These restricted days are related to launch days, test days, etc. In certain cases, it is possible to obtain a waiver from the KSC Superintendent, allowing excavation work to proceed on "No Dig Days". Contact LMSSC POC for additional information on obtaining a dig waiver.

#### WORKING IN KNOWN CONTAMINATED AREAS

When work (especially work involving excavation or dewatering) is proposed in an area (i.e. O&C) which has been evaluated by the NASA KSC Environmental Program Branch, LMSSC will provide information obtained from the KSC Environmental Program Branch office to the Subcontractor. Certain activities may require additional soil and ground water testing, worker protection precautions, and management of soil/groundwater. These activities shall be coordinated through and approved by LMSSC POC/ESH.

#### SCHEDULING UTILITY OUTAGES (WATER/SEWER/ELECTRICAL/COMMUNICATION/FIRE ALARMS etc.)

Subcontractors shall provide LMSSC POC with information regarding any planned utility outage with adequate (at least 5 business days) lead time to coordinate with proper authorities. Coordination with operations personnel and utility

operators/NASA KSC Contractors prior to interruption of service is critical.

Connections to primary service utilities must be made by (or supervised by) NASA KSC personnel responsible for that system.

#### WORK ON (OR EFFECTING) EMERGENCY EQUIPMENT

Subcontractors working on (or effecting) emergency equipment, including fire alarms, emergency lighting, smoke/heat detectors, emergency exit doors, etc. must coordinate these activities with the LMSSC POC and ESH to ensure that no critical systems or operations are affected. This coordination includes developing necessary work-around or scheduling these activities during inactive periods, as necessary. Interface with other NASA KSC contractors responsible for the various systems may also be necessary.

#### ROADBLOCKS/CONVOYS

When necessary, arrange for convoy or other escorted transport, contact LMSSC POC. Consideration should be given to performing off-shift operations to minimize disruption to operational schedules.

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### O&C BUILDING FACT SHEET

The O&C Building was constructed in the early 1960's and was one of the first buildings to be built in the KSC Industrial Area. The facility houses offices, laboratories, a fitness center, astronaut living quarters and an assembly and test bay. During the 1960's and 1970's the O&C assembly and testing of the Apollo Spacecraft. The O&C Bays were retrofitted and used to process payloads for the Space Shuttle program and and integrated testing of components for the International Space Station. The current configurations of the O&C Building include a combination of several additions and improvements.





O&C BUILDING FRONT OR NORTHFACE VIEW

EMERGENCY EGRESS FOR O&C BUILDING.

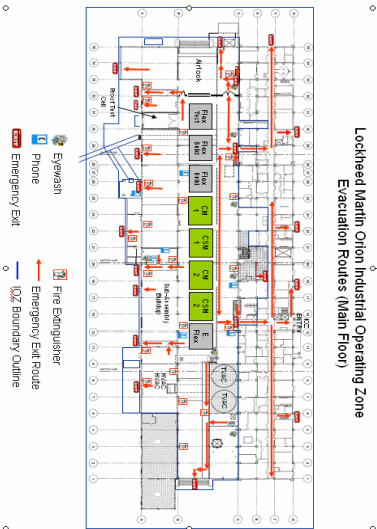
- On the south side, first floor, there are seven emergency egress routes to the outside of the building:
  - a. Between processing rooms A and B (east end - Door D-10)
  - b. Between processing rooms B and C (middle - Door D-14)
  - c. Processing room C (middle - Door D-15)
  - d. Room 1485 (middle - Door D-17)
  - e. Room 1489 (middle - Door D-18)
  - f. Room 1493 (west End - Door D-19)
  - g. Between rooms 1493 and 1497 (west end - Door D-20).
- On the east end through Door D-2, located in the east high bay vertical-lift door.
- On the west end through Door D-23 in the northwest corner of the bay area.
- On the north side, first floor through Door A-1 on the east end and Door C-7 on the west end.
- In the Altitude Chambers at the north side on the second level.
- All emergency egress exits are marked by lighted exit signs.

Formatted: Bullets and Numbering

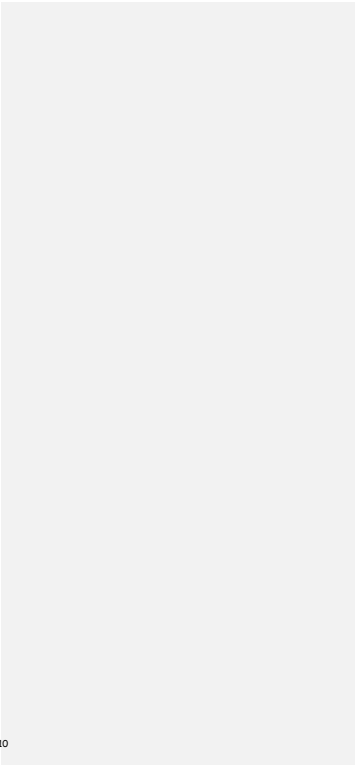
(SEE AERIAL PHOTOGRAPH AND FACILITY LAYOUT)

**EMERGENCY EGRESS ROUTES FOR THE O&C BUILDING**

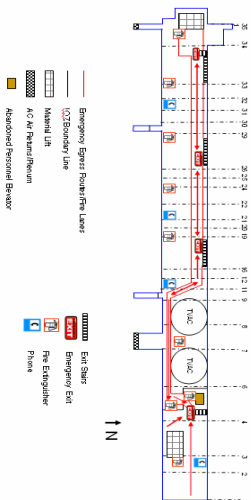
**(FIRST FLOOR)**



**EMERGENCY EGRESS ROUTES FOR THE O&C BUILDING**  
**(BASEMENT)**



## Lockheed Martin Orion Industrial Operating Zone Evacuation Routes (Basement)



**APPENDIX 1  
KSC FORM 16-287**



CCAFS/KSC WELDING AND BURN PERMIT			
WARD NO. _____		PERMIT NO. _____	
<b>WELDING</b> <input type="checkbox"/> <b>CUTTING</b> <input type="checkbox"/> <b>OPEN FLAME</b> <input type="checkbox"/> <b>GRINDING</b> <input type="checkbox"/> <b>BURNING</b> <input type="checkbox"/> <b>TAR POT</b> <input type="checkbox"/>			
Permit Issued To _____			
Representing _____			
Telephone No. _____			
Date of issue _____	Shift Time _____	Expiration Date _____	Time _____
Number of Shifts: 1st <input type="checkbox"/> 2nd <input type="checkbox"/> 3rd <input type="checkbox"/> All <input type="checkbox"/>			
Location (Building, Room, Area involved) _____			
Facility No. _____	Inside <input type="checkbox"/> Outside <input type="checkbox"/>	Room/Room No. _____	Outside Area _____
Brief Description of Work _____			
Scheduled: Yes <input type="checkbox"/> No <input type="checkbox"/>			
Fire Suppression/Control Systems to be Disabled _____			
<input type="checkbox"/> Contractor Provided Fire Watch Required (During and 30 minutes after) <input type="checkbox"/> Fire Watch Not Required <input type="checkbox"/> Assessed by Fire Services Required (before disabled, Fire Services becomes permitting official)			
Special Requirements (Attachment Required for Tar Pot Operations) _____			
BASIC REQUIREMENTS			
1. Follow Regulations NFPA 51B / OSHA 1910.252 / OSHA 1926.352 2. Appropriate Type Fire Extinguisher on-site at all times 3. Observe any special area restrictions 4. Upon completion of work, register to notify the JMO (Complex Control Center at 333-3127)		Do not perform operation: a. in confined facilities when operations are suspended b. in explosive atmospheres c. OVR's 35 feet of combustible status conditions are attached and if they are to be used d. in oxygen enriched atmospheres e. above levels of flammable liquids, gases, or vapors f. On a collection of pots containing flammable or combustibles.	
Permit Issuing Official's Signature _____		Requester's Signature _____	Date _____

THIS FORM IS A CONTROL DOCUMENT AND IS VALID UNTIL REVISED

**APPENDIX 3**  
**KSC FORM 26-312**

 <b>JOINT - BASE OPERATIONS SUPPORT CONTRACT</b> <b>UTILITY LOCATE/EXCAVATION PERMIT REQUEST</b>		
1. Date	2. AF Form 103 Attached? <input type="checkbox"/> Yes	3. Check One: <input type="checkbox"/> Permit to Dig <input type="checkbox"/> Locate Only/No Digging
4. Requester's Name	5. Requester's Phone No.	6. Requester's Fax No.
7. Requester's Company	8. Mail Code/Address	
9. Technical Contact Name	10. Contact Phone No.	11. Contact Fax No.
12. Estimated Start Date	13. Estimated End Date	14. Grid No.
15. Building No.	16. Secondary Location (Building Name or Additional Info)	
17. Emergency request justification (if required)		
18. Reason for permit/Statement of work		
<b>OFFICE USE ONLY</b>		
Comprehensive Planning Notes		
Environmental Notes		
Project No. _____ Ext. MH _____ Category Code _____		

See next page for completion and process instructions.

453 FORM 26-01 08 0201 0003 PREVIOUS EDITIONS ARE OBSOLETE

## APPENDIX 2 (continued)



## INSTRUCTIONS

Please complete as many fields as possible.

- Block 1 Date submitted
- Block 2 If permit is for CCAFS, and you have a completed AF Form 100, Base Civil Engineering Work Clearance Request, please include a copy with this request to accelerate the permit process.
- Block 3 Check one. If you are NOT going to dig, but need an underground utility locate, check "Locate Only".
- Block 4-6 Enter the name, phone, and fax number of the person who will be receiving this permit.
- Block 7-8 Enter the name of the Requester's Company and KS/C/CAFS mail code.
- Block 9-11 Enter the name, phone, and fax number of the Technical Contact for this permit request.
- Block 12 Enter the date excavation is expected to begin.
- Block 13 Enter the date excavation is expected to be complete. Permit will be closed on this date.
- Block 14 N/A (will be entered by the Excavation Administrator Office process).
- Block 15 Enter the building number where work will be performed (or closest building number).
- Block 16 Enter additional information as necessary.
- Block 17 If excavation is of an emergency nature and requires priority, enter justification.
- Block 18 Enter a description of why this permit is being requested, i.e., what work will be performed and why.

1. Fax (321-891-0336) or hand carry this request, along with an official acreable map, drawing or sketch (area to be excavated should be clearly marked) to the Mission Support Excavation Administrator (66-1006 OSD Rm. 1455).
2. After initial siting, environmental, archaeological, and ecological impacts are identified, an Excavation Permit will be faxed to the REQUESTER indicated on this form.
3. You can call the Excavation Permit Administrator's Office (321-961-3609/9940) if you have any questions on the dig permit process.
4. To schedule an appointment with the Excavation Permit Inspectors to locate underground utilities and/or obtain an approval signature on this permit to dig, Requester should phone the Excavation Permit Inspectors' Office (321-867-7251/0967) at least 48 hours prior to digging.
5. Requester should notify the Excavation Permit Administrator when excavation is complete.
6. Permits may be extended by calling the Excavation Permit Administrator Office, but all permits will be closed upon expiration unless notified.

\*\*\*Emergency requests will be processed on a real time basis\*\*\*

AF FORM 100 (10-10) (REV. 08/03) (FORMERLY AF FORM 100)