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**Instrument Support Request (ISR)**

The Instrument Support Request has been designed to gather the information needed to prepare for the deployment of an instrument at an ARM site to insure that all instrument requirements can be properly accommodated by Site Operations. Please complete one Instrument Support Request per instrument, answering all questions as completely as possible. If you feel a question is not applicable to your deployment, please write “NA” – do not leave any questions blank. Site Operations personnel will review this information and will contact you to discuss the requested support.

***Cautionary Note:******Any change or substitution to the information described in this Instrument Support Request will require further evaluation by Site Operations before the instrument may be energized and operated, possibly delaying the start of your field campaign.***

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| **1. General Information** |  |
| Name: |  |
| Affiliation: |  |
| Address: |  |
| Phone Number: |  |
| Fax Number: |  |
| Email address: |  |
| Instrument system name: |  |
| Brief description of instrument  |  |
| Type of deployment:* Field Campaign (Provide campaign name)
* ARM instrument development/evaluation
* New, operational ARM instrument
* Non-IOP guest instrument
 |  |
| ARM site where instrument will be deployed: |  |
| Brief description of your operations plan: |  |
| Are any instruments currently installed on-site deemed critical to your deployment or experiment? |  |
| CAUTIONARY NOTE FOR NORTH SLOPE OF ALASKA DEPLOYMENTS: * Lodging at the ARM Duplex is on a first-come, first-served basis. Do not automatically assume that your stay can be accommodated.
* Vehicle use at the NSA is limited, and ARM Site Operations activities take priority. Do not automatically assume that ARM vehicles will be available for your use.
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| **2. Deployment/Removal Support Needs** |  |
| Planned date(s) of deployment. Please indicate your planned arrival and departure dates (Reminder: A Site Access Request must be submitted and approved for each person requiring access to an ARM site to support this instrument deployment <http://www.db.arm.gov/SARS2/>) |  |
| How will your equipment be shipped/transported to the site? (e.g. Yellow Freight, FedEx, private car/truck, etc) |  |
| Size and weight of equipment? |  |
| Will your equipment need to be stored prior to set up or subsequent to tear down? |  |
| Will your shipping containers need to be stored during the deployment? If yes, please indicate number and size |  |
| Will you need our assistance to unload, load, or transport your equipment on-site?  |  |
| Will you need any special services for unloading/loading your equipment? If so, arrangements for crane, forklift or other special services must be made at least 4 weeks in advance. |  |
| What is the desired location for your instrument? Maps for fixed sites are available at: * SGP: <http://www.arm.gov/sites/sgp>
* NSA: <http://www.arm.gov/sites/nsa>
* TWP: <http://www.arm.gov/sites/twp>
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| What is the field of view (FOV) of your equipment?* hemispheric FOV
* narrow FOV – zenith pointing
* narrow FOV – solar tracking
* narrow FOV – scanning (describe)
* other (describe)
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| Does your equipment require a specific alignment? |  |
| What fetch or surrounding terrain/land use do you require? |  |
| What other instruments does your equipment need to be collocated with? |  |
| Could your equipment generate or be susceptible to interference (radio frequency, electromagnetic, acoustic, aerodynamic, etc) with ARM or other guest instruments? |  |
| Are there any other location considerations? |  |
| Do you intend to mount your equipment on an existing concrete pad, platform, tower, stand, solar tracker, etc? |  |
| Do you intend to provide your own platform, tower, stand, solar tracker, etc? |  |
| Will you need assistance from Site personnel to set up, mount, or install your equipment? |  |
| Will you need shelter for your equipment? |  |
| Will you be providing a shelter for your equipment? |  |
| Will you need any utility support? (water, etc.) |  |
| Are there any other deployment or removal support needs? |  |

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| **3. Data Connections** |  |
| Do you require connection(s) to site data communications networks? |  |
| What is the planned connection method? (Ethernet, serial, etc.) |  |
| How many connections do you require? |  |
| What network services do you require? (ssh/scp (secure shell/secure copy), ftp (file transfer), telnet (remote terminal), http (web server), smtp (email), etc.) |  |
| Will your data be collected and processed by the ARM User Facility Site Data System? (If yes, have the collection and processing requirements been coordinated with ARM Engineering?) |  |
| What volume of data do you plan to transfer? (Note - Large data transfer volumes will need to be scheduled so as not to interfere with ARM data transfers) |  |
| Will you be connecting computers to the ARM network? |  |
| What type of computer(s) and what operating system and version (e.g. Sun OS 5.5.1, Mac OS 10.2.6, Windows 7, Redhat Linux 9.0) do they use? |  |
| What virus protection software is installed in your computer(s)? |  |
| Before any of your computers will be connected to the network, you must submit each of them to our technicians for a virus scan. Do you consent to this? |  |

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| **4. Data/Metadata information** |  |
| What will the data format be? |  |
| What will the data size be? |  |
| What will the data name be? |  |
| What is the expected daily volume of data? |  |
| Will data from the instrument be available to the data system hourly?\* |  |
| If Not, describe the availability? |  |
| What is the location of the data on the instrument? |  |
| Are the data files documented in the related ECO? |  |
| What is file naming convention? |  |
| What is data/metadata file structure? |  |
| Have sample data files been provided to the collection and ingest developers? |  |
| Please provide a brief description of each instrument system to be associated with an IP address: |  |
| Have sample data files been provided to the collection and ingest developers? |  |
| Please provide any information you feel is necessary to support your deployment. |  |
| Are all related ECOs and EWOs up-to-date? |  |

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| **5. Electrical Requirements** |  |
| Will you need to connect to site AC power? If yes, please answer the following for EACH LOAD you wish to connect to the site AC power. In the event your equipment is contained in a single rack, enclosure, or trailer, that is fed by a single power cord, it is only necessary to provide the details of that main power feed. |  |
| What is the voltage of each load? |  |
| What is the frequency of each load? |  |
| What is the amperage of each load? |  |
| What is the phase of each load? |  |
| Are your AC power requirements other than 120 Volt AC, 60Hz, single phase (NEMA plug type 5-15P or 5-20P? If yes, please provide the NEMA plug type(s). |  |
| Has your AC-powered equipment been inspected and certified as safe by a Nationally Recognized Testing Laboratory (NRTL), such as Underwriters Laboratories?  |  |
| If the equipment has not been listed by a Nationally Recognized Testing Laboratory (NRTL) has it been examined and approved by a designated electrical equipment inspector? |  |
| Please list those pieces of your AC-powered equipment that have not been inspected and certified as safe. |  |
| ***NOTE:*** All AC-powered equipment that has not been inspected and certified as safe will be inspected by a designated Site Electrical Safety Officer prior to being energized. |  |

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| **6. Operations and Maintenance Support** |  |
| Will you require Site staff support during this deployment? (e.g. for cleaning, alignment, calibration, data collection/transfer, rebooting computers, etc) If so, please describe the following:* Tasks, frequency, and time to complete
* Documentation / procedures available
* Training, description and dates
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| Will you need any Site tools or parts?* Hand tools (screwdrivers, hammers, etc)
* Specialty tools (soldering iron, etc)
* Electrical / electronic parts
* Test / calibration equipment (oscilloscope, etc)
* Simple hardware (nuts, bolts, screws, etc)
* Simple building materials (lumber, plywood, etc)
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| Will you need any furnished expendable supplies? (If yes, which and what quantity)* Speciallty gasses – He, N­2, dry air, etc
* Cryogens – liquid N2, dry ice, etc
* Deionized or distilled water
* Cleaning materials
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| **7. Safety** |  |
| Does any of your equipment incorporate a laser? (If yes, please provide the class, wavelength, output power, restricted area requirements, eye safe range) |  |
| Does this equipment emit microwave energy of any kind? (If yes, please provide the frequency, output power level, restricted area requirements) |  |
| Does this equipment emit acoustic energy of any kind? (If yes, please provide the output dB, and restricted area requirements. |  |
| Does the equipment incorporate nuclear material or emit ionizing radiation? (If yes, indicate the isotope, amount, type of emission (alpha, beta, gamma, X-ray, etc), activity level, containment, and handling procedures.) |  |
| Will any work be performed at an elevated area (workers feet more than 6 feet above ground level) for the installation and/or operation of this equipment? |  |
| Will you be bringing/using any compressed gases? |  |
| Will you be bringing/using any cryogens (e.g. liquid nitrogen or dry ice)? |  |
| Will you be bringing/using chemicals (reagents, solvents)? If yes, please indicate which chemicals, their quantities, their purpose, and describe how you plan to store, handle and dispose of them) |  |
| What personnel protective equipment (PPE) are you bringing to facilitate the safe handling of the chemicals? |  |
| Will you be bringing/using any other hazardous materials? |  |
| Will there be any waste generated by the operation of this equipment? |  |
| Will you be bringing any safety equipment for your operation? (i.e., Fire extinguishers, safety glasses/goggles/face masks, etc) |  |
| Will you be bringing any safety signs for your operation? (i.e., Restricted area, microwave radiation, etc) |  |
| Are there any other safety-related issues associated with your activities while on-site? |  |

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| **8. Additional Information** |  |
| Please provide any additional information you feel is necessary to support your deployment. |  |