



Customer Guide

FOREWORD

Welcome to Space Port Indiana, Inc.TM Our goal is to provide you, *our customer*, with the test support and services you need to successfully complete your test program or mission. We stress the necessity for a team approach to testing, a team that is made up of many organizations, including contractor(s), and the various test support personnel.

The purpose of this guide is to assist you in requesting test support and services from the Space Port. The term *Test Request* will be used for the remainder of this guide, but it should be understood to also include all range use and service activities. Our guide applies to all Space Port customers, which includes:

- Department of Defense
- US Government agencies (Federal, State, & local)
- US Defense Contractors
- Private Organizations and Commercial Enterprises
- Allied Foreign Governments
- Educational Institutions

We look forward to discussing with you the ranges, facilities, and capabilities we have to offer to you! We also encourage early contact with our technical staff that will assist you in preliminary planning efforts and development of your test program or services. Regardless of the phase your program is in, we are always available to support your own planning efforts. You should also understand that Space Port Indiana is sensitive to the different types of tests that may be conducted here.

This guide is not designed as an obstacle to research or testing. Our team will guide you through processes for access to the Space Port so that you are not engaged in any unnecessary paperwork.

Some of our customers have very complex requirements or deal with more complicated materials. If your test is a simple one, rest assured we will make the process of gaining access and schedules a simple one as well.

We also welcome your comments and criticisms concerning this guide. Your input is important to us, and all suggestions for improvements will be considered for future updates to this guide.

Guide Outline

This guide consists of five major sections that cover the guidelines for planning, organizing, and submitting your test request to us. Section 1 provides an overview of the Space Port complex and operating test environment. Section 2 covers our planning process we use within the Space Port community for preparing for your test. Section 3 outlines the information needed by us in your Test Request. Section 4 provides you additional guidance on the special information requirements that are essential in planning for your test. Section 5 explains the Environment Impact Analysis process.

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Operations

Space Port Indiana, Inc.™ is designed to offer military, commercial and educational institutions access to airspace up to and including the near space environment. We understand that our customers can gain invaluable knowledge about performance of hardware, sensors and platforms when introduced to the conditions that exists in 1% of Earth's atmosphere.

Our existence is centered on providing our customers with low-cost, supported T/E and R/D opportunities. We strive to provide any assistance and support related to our customers mission needs and will work diligently to that end.

Near Space Balloon/Rocket Test Facility

Space Port Indiana, Inc.™ is a test installation, using facilities, and ranges which are regarded as “aerospace assets.” These assets are sized, operated, and maintained primarily as test and evaluation facilities. A number of universities and private companies have already engaged our team for future launch and testing opportunities. Each year, as the Space Port grows, we will develop more testing and data collecting capabilities and be a leader in innovative validation techniques in the United States.

Space Port Airspace

The airspace above and around the Space Port is the most critical asset of the range. The airspace is managed by the Columbus Municipal Airport in conjunction with the Space Port. The airport provides a control tower in Class D airspace and is also supported by fire rescue and emergency response capabilities. There are adequate runways and taxiways for private jets and commercial aircraft and an FBO and Fuel are available. Some areas available or within close proximity of the Space Port include:

- Restricted Airspace
- Military Training Routes (MTRs)
- Military Operating Areas (MOAs)
- Air Traffic Control Assigned Airspace (ATCAA)
- Slow Routes (low altitude)

***Land T&E
and
Training
Ranges***

The Space Port has use of a large area at the Columbus Municipal Airport. There is a large asphalt apron available for staging launch systems and for rocket engine tests. The building is approximately 6000 sq feet and has three large overhead doors. This facility has a lab and is used for balloon inflation and early examination prior to flight. There is ample parking available at the launch building and at the airport terminal. A restaurant and meeting facilities are also available for large numbers of attendees.

***Space Port
Instrumentation***

T&E is supported by a range instrumentation system which includes precision instruments for data collection, systems for data transfer, and radio and land line communication networks. These systems are integrated through a centralized mission control facility located at Space Port Indiana, Inc. A major part of the range instrumentation system focuses on capturing time-space-position-information from each test. Other essential pieces of the instrumentation system include data handling systems, threat simulator radars, telemetry systems, and communication support systems. These systems are permanently installed ground components and can be used for ground or air requirements.

Initial Request

Previous US Customers

Some customers have already established relationships with the Space Port. In these cases, you may address your Test Requests or questions directly to your Space Port TEOs.

New US Government and Commercial Customers

US Government includes the DoD and non-DoD departments and agencies. Your Test Request should be addressed to:

Space Port Indiana, Inc.
Space Port Centre
4770 Ray Boll Blvd.
Columbus, Indiana 47203
765 606 1512
Email: contactus@spaceportindiana.com

International Customers

International customers can be both foreign government agencies and foreign private industry. Your Test Requests should be addressed through your appropriate Embassy to:

Space Port Indiana, Inc.
Space Port Centre
4770 Ray Boll Blvd.
Columbus, Indiana 47203
765 606 1512
Email: contactus@spaceportindiana.com

Private Sector T&E Services

Space Port Indiana™ maintains a World Wide Web site to allow US private companies to describe their T&E needs. This web site offers US commercial companies seeking our T&E services a source of alternate T&E facilities and private sector services. For additional information, please visit our site at URL: <http://www.spaceportindiana.com>.

Visit Requests

US Government and Commercial Representatives

Before visiting Space Port Indiana, Inc.™, you must submit a visit request to the Public Affairs office. The visit request should be signed by your organization security manager or other properly designated personnel. The person signing the visit request is certifying citizenship and other data of the personnel indicated on the visit request. The Space Port will utilize a special Visit Request to identify persons seeking approval to visit the Space Port when access to classified information is or may be involved.

Foreign Governments and Commercial Representatives

A person whom is not a US resident representative who wishes to visit the Space Port to plan or conduct a test should submit a visit request to their Embassy in Washington DC for processing. You must receive approval from your Embassy before traveling to the Space Port. These requirements apply to all members of your test team, as well as other personnel desiring to visit Space Port Indiana™. If you are a US resident or Visa holder you may contact us for a visit without utilizing a US embassy.

- The request should state the specific purpose of the visit, period of time access is required, and point of contact at the facility to be visited.
- Requests should be made as far in advance as possible. This will assist in access being granted in a timely manner for program support.
- If you are unsure about this process, we encourage you to contact the embassy representative assigned to your program for assistance.

Additional Space Port Information

If you are not familiar with the Space Port capabilities, a visit to our facility to discuss your test prior to submittal of a formal Test Request would be beneficial. An excellent source of additional information, both general and specific, can be found on the Space Port Indiana™ Home Page on the Internet.

The address is: URL: <http://www.spaceportindiana.com>

Lead Time Requirements

Requests for our support should be submitted as soon as your requirement is known to allow sufficient time for the planning and documentation of your requirements. For some types of tests, a six month minimum lead-time prior to the start of our support is desired. Some factors that can influence lead-time are complexity of tests, requirements for procurement or fabrication of instrumentation, aircraft modifications, and availability of test resources such as aircraft, test range configurations, or special computer support requirements.

Our Planning Process

Every successful operation is a result of proper planning and coordination. The value of these functions cannot be overstated. This is especially true for testing. Any overlooked issues made during your planning phase can reappear during your testing phase and may cost you more in time and money than if those issues had been addressed earlier. A simplified view of the test planning process used by the Space Port is shown in Figure 2-1.

Initial Contact

You initiate the test planning process by contacting the Space Port. General test program details will be requested of you so that we can determine the correct organization to support your test and assign a Programming Engineer (PE).

Programming Engineer

The assigned PE will be involved in all phases of your test program: planning, provisioning, execution (conduct), analyzing, reporting, and closeout. Our PEs are also involved with all the disciplines of your test program: financial management, technical support, facilities, logistics, safety, security, frequency control and analysis, and test reporting.

Cost Estimates

Our PEs can also provide initial cost estimates with accuracy equivalent to the degree to which the test's scope has been established. The test requirements available early in a program are normally very general and require some "estimation" by the customer and the PE as to the general type of test resources required. We usually refer to them as rough order of magnitudes (ROMs) or estimations. ROMs provided are for your assistance in resource allocation, but are not "official" cost estimates.

Preliminary Planning

We encourage you to schedule a preliminary planning meeting from the PE at the Space Port prior to the submission of your test request. This meeting will benefit you in a couple of ways. First, it will allow you to receive orientation briefings and tours for a first-hand look at our facilities and capabilities. Secondly, it allows face-to-face discussions with our technical staff members for a better understanding of your requirements, suggestions for test methodology and procedure, and results in a more reliable time and cost estimate.

Environmental Considerations

You are strongly encouraged to provide the Space Port planning team with any previous environmental impact analysis documentation or relevant technical reports to aid in any test considerations by the PE

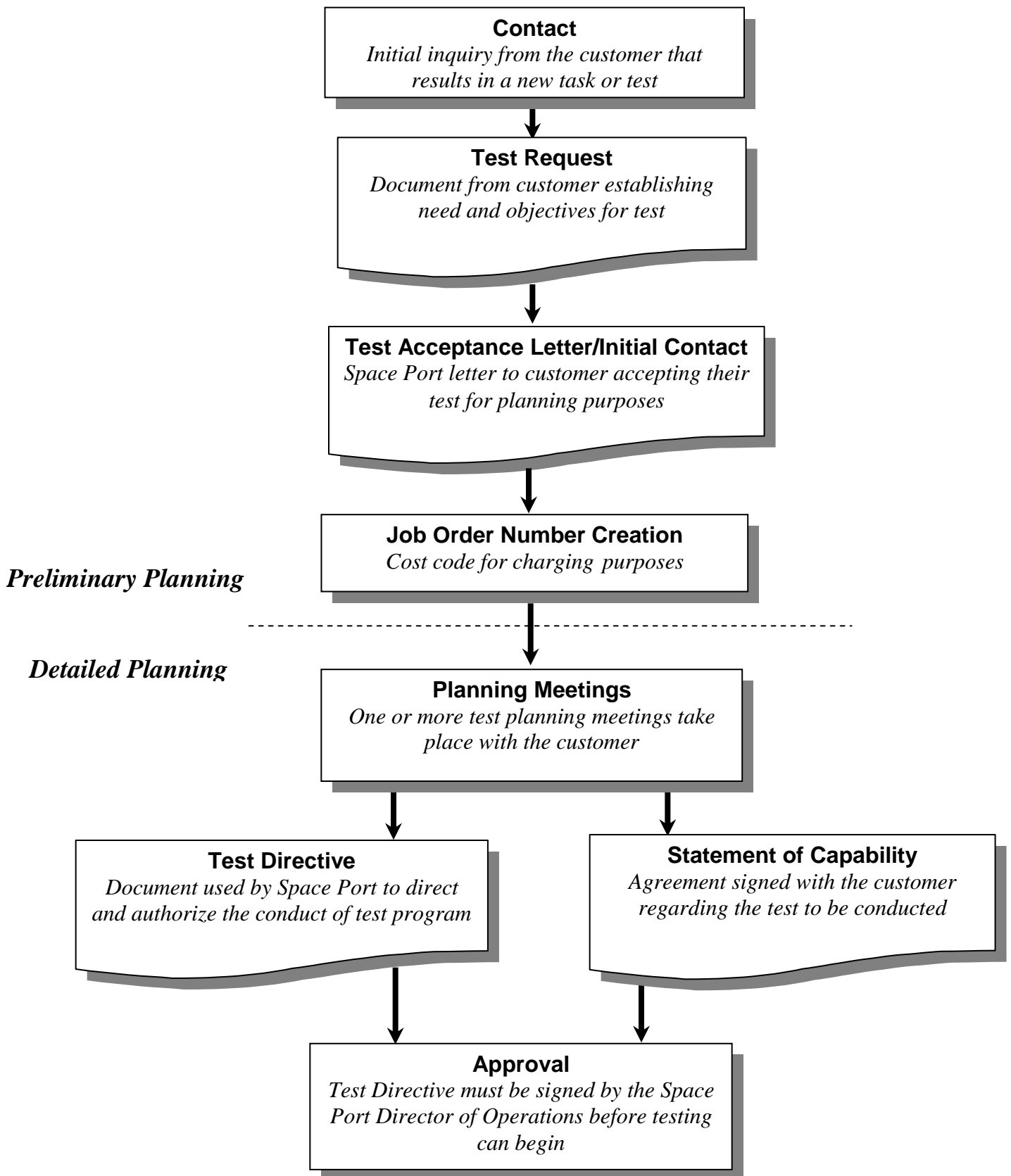


Figure 1-1. Test Planning Process (Simplified)

for environmental analysis. This can include points of contacts at other regulatory agencies that have experience with your program. Early discussion and documentation of potential environmental considerations of your program can save you time and resources.

The Space Port planning team will also engage their Environmental Coordinator for their participation in this stage of the test planning process, regardless of whether an EPA representative has been assigned or not. For more information on our environmental process and other considerations, please see Section 5, Environmental Documentation.

Test Request

Test program details are normally sent to our PE later via a formal test request. The Test Request is any signed document from you to our program engineer which establishes the need for a test, the objectives of the test, the estimated schedule, and other information for the PE to start the planning process. Examples of a Test Request can be Test Information Sheets (TIS), a Program Introduction Document (PID), and support requests.

Acceptance of US Commercial Requests

The Under Secretary of Defense for Acquisition and Technology has recently established a procedure that applies to the decisions to allow access to US commercial organizations and contractors desiring access to the Major Range and Test Facility Base (MRTFB) installations. This procedure is intended to enforce the policy that the MRTFB installations are not to compete with private sector sources of testing services for commercial test work. Because of this decision, we notify all bases and ranges in the continental United States (CONUS) of our capabilities and they can refer you if necessary.

Defense contractors performing work to carry out DoD contracts are exempt from the requirements contained in the DoD policy and will be permitted access to MRTFB T&E capabilities without regard to the provisions against competing with private sector capabilities.

Test Acceptance Letter/Initial Contact

The information provided in your Test Request will be used in our prepared Test Acceptance Letter/Initial Contact (TAL/IC) letter, which is our formal record of your intent to test with the Space Port. The TAL/IC letter describes in general terms the test and desired schedule, to inform the rest of the test support organizations at Space Port Indiana™ that test planning is about to begin. The letter also designates a time and place for a kickoff meeting to be held to discuss the following:

- Upcoming test
- A summary of the test
- Planning Work Breakdown Structure (WBS)

***Job Order
Number
(JON)
And Priority***

Upon receipt of a Test Request, the PE will also obtain a job order number (JON) and test priority. The JON is annotated on all requests, tasks, schedule requests, and funding documentation. Every test and task done at the Space Port is identified with a JON. It ties together all work performed and charges made to that test/task. The initial priority is assigned when the JON is established. This priority puts the test/task in the queue for all activities such as scheduling, supplies, modification work, etc.

***Planning
Funds***

Following the release of the TAL/IC, we may request planning funds from you due to the extensive amount of advance planning and other preparation that is sometimes required to support a test. We will submit a “planning” estimate to request funding for that purpose for early involvement prior to test conduct.

All costs directly related to preparing for the test are charged to the test program. These funds are necessary to support early planning meetings, target buildup, modifications, test planning, travel, long lead items, and tasks prior to the formulation of the statement of capability (SOC).

***Statement of
Capability***

The SOC is an agreement between you and the Space Port regarding the test to be conducted. It specifies estimated schedule, costs, and risks. The SOC is in effect the project baseline. Therefore, any significant change to the baseline must be documented in writing through a revised SOC. A significant change is defined as any customer or Space Port initiated action that causes the estimated cost or schedule of the project to deviate by more than 15 percent from the agreed baseline. This document also formally requests the required funding from the customer to conduct the test.

***Detailed
Planning***

The first formal meeting of a test program is the kickoff meeting. The kickoff meeting gathers all the possible players who may have a role in supporting the test. This meeting can be held at your location, a contractor’s facility, or at the Space Port. Discussion usually centers on facility space, special test equipment, security, range resources, and data products. One or more additional test planning meetings may take place, depending on the complexity of your program or the data requirements.

As mentioned earlier, there is great value in including environmental considerations as early as possible in your planning process. Any previous environmental impact analysis documentation or relevant technical reports to aid in accomplishment of Space Port specific environmental analysis can you save time and money.

Test Engineer

The kickoff meeting also introduces the Test Engineer (TE) as the point of contact for the test design, execution, and reporting. The TE has many roles in planning that include the following:

- Conducting research on similar past testing
- Providing examples of similar past testing
- Discussing range assets that could be used for the test
- Working with you to develop draft test objectives
- Providing options to meet test objectives
- Discussing cost information for the options provided

Test Directive and Method of Test

The Test Directive (TD) is the document used by the Space Port to direct and authorize the conduct of a test program. It contains the detailed test plan (Method of Test [MOT] and necessary supporting appendices). The PE, TE, and representatives from the necessary supporting agencies are responsible for developing the TD. The TE will refer to the TD throughout the test program, as it provides guidance on all facets of the test.

Other Appendices

In addition to the MOT, there are other appendices. These inputs to the TD describe the support to be provided, who will provide it, and to what extent. Not every TD needs each of these appendices. The PE and TE will decide which ones are required for a given test. These appendices include the following:

- Technical Support Appendix
- Logistics Appendix
- Safety Appendix
- Environmental Appendix

Environmental Impact Analysis

An analysis of the environmental impact is required by public law for all tests proposed by the Space Port to be conducted in the State of Indiana. The PE begins this process by submission of an Preliminary Environmental Impact Analysis. Because of the importance to environmental issues, Section 5 is devoted to this subject.

Exceptions to Normal Process

For most tests conducted at the Space Port, the Space Port is the Responsible Test Organization (RTO). This means we develop the MOT and a TE is assigned to submit mission requests, conduct the test, analyze the data, and provide a report of the results.

There are exceptions to this normal process where we may provide only limited services. In some cases the test customer may act as his

own RTO, and all we do is act as a Participating Test Organization (PTO) to provide range resources (often referred to as “rent a range”).

As a PTO, our PE still prepares the TD, but the customer provides the test plan or concept of operations. As a PTO, we identify a test coordinator to submit the mission request and conduct the test for most test programs. Whatever the RTO or PTO arrangement, the functions, for planning are essentially the same.

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Test Request

To assure an effective and efficient program, each program must be planned and documented in sufficient detail to enable the support agencies to provide their required support. Preparation of a comprehensive Test Request with detailed requirements can translate directly into savings of both time and money.

Your final Test Request should contain as much information as possible at the time that the request is submitted. In an attempt to ensure early consideration and planning, you may use this proposed outline for a test request.

Title of Test Request

Introduction

The introductory paragraph should discuss the circumstances or reasons for your test.

Background Information

Authority. This paragraph applies to US Government only. The documentation you should have authorizes the program or test effort for which support is being requested. The recognized authority may be contained in a document originating within or having been approved by Headquarters United States Air Force (HQ USAF), major commands, or other DoD agencies. A copy of the authorizing document should be provided with the Test Request. Please provide a Program Element and/or a System/Program Number, if possible.

Priority. A criticality Rating or a specifically assigned priority is needed to ensure proper placement of your test program in the priority system. This assigned priority will be used to schedule your test missions on the Space Port facility in competition with other test programs using our test resources during the same period of time. If your program does not already have a criticality Rating assigned and you are a/an:

- *US Government or US Private Industry Contractor.* You should request a priority rating from the appropriate agency or department that manages your project (i.e.: USAF, ARMY, NAVY, Etc.)
- *International Customer* (both foreign government agencies and foreign private industry). You should request a Precedence Rating from United States DoD agency sponsoring your project.

Description. A brief description of your requirement to test a system, subsystem, component, or support equipment is required. The

physical and functional characteristics of the item to be evaluated and/or tactics or techniques being explored should be included in the description.

Reference Material. Reference material, such as contracts, specifications, technical data, related reports, and others, is helpful in our planning for and providing the support desired. Environmental impact analysis documentation and relevant technical reports dealing with environmental issues can aid in accomplishment of EPA analysis. Please include any appropriate documentation with your Test Request, if possible.

Schedule *Desired Starting Date.* Specify the desired starting date for your test.

Planned Duration. State the planned duration of your test.

Milestones. Specify the milestones that must be met and the impact on your program if they are not met. If possible, furnish program schedules for design reviews, development, or production decisions, contractual commitments, deployments, tactical applications, etc., to properly plan a schedule for your test.

Objectives A clear understanding of your test objectives assists in the design of the testing effort and the manner in which each objective is accomplished. Please make the objectives clear and concise and list them in the order of their importance. Objectives should cover all aspects of the testing effort, including:

- Technical;
- Reliability and Maintainability (R&M);
- Value Engineering;
- Evaluation of technical data;
- Aerospace Ground Equipment (AGE);
- Air and/or ground crew comments;
- Test item effect on aircraft performance;
- Tactics or techniques concerning optimum use of the item.

Responsible Test Organization (RTO) The Responsible Test Organization (RTO) is usually the agency responsible for designing and planning the overall testing and evaluation program. This includes arranging for support from other agencies, preparing the test plan, conducting the test, analyzing the data, and preparing the final report.

***Participating
Test
Organization
(PTO)***

If a Participating Test Organization (PTO) is to perform a key role in the testing effort, please outline the specific responsibilities such as services, equipment, and personnel to be provided by that agency, if known.

***Key
Personnel***

List the person or persons to be contacted, including rank/grade, title/function, agency/office symbol/address, and telephone numbers.

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Detailed Requirements

This section describes information you will need to provide to us at subsequent planning meetings to specify our support and to further develop your test plan. Your test plan will be integrated into our Test Directive (TD) which is the formal authorization to commit funds and resources to execute the test. This information is useful in working with the Space Port support functions to schedule the proper resources, to ensure the resources are available, and to plan mission requests.

TECHNICAL REQUIREMENTS

- Resources Required** Most programs use the existing Space Port land, instrumentation and facilities without modifications. Some programs may require extensive preparation which can include modification of existing instrumentation systems, reconfiguration of an existing range, provision of specialized power, establishment of communications, minor range construction, and so forth.

- Data Requirements** Data requirements probably represent the most detailed description and definition than any other requirement; therefore, each parameter to be measured/recorded should be thoroughly defined and stated. We will make every effort to provide the data products you require, but international customers should be aware that some information about our range systems and facilities is not releasable to them.

- Timing** Designate minimum time increment to which real time must be recorded for data correlation and readout without interpolation.

- Telemetry** State telemetry requirements.

- Frequency** State the frequency and bandwidth to be monitored.

- Frequency Management** If you are providing equipment that transmits in open air, you will need to provide information to us so that we can obtain frequency authorization for you to radiate.

- Photography** State all photographic support requirements.

- Water Recovery** Space Port Indiana offers access to the Gulf of Mexico if a water launched test is required. We utilize a ship to launch your payload and

to recover it. If you plan to test over the Gulf of Mexico, list the weight, length, and dimensions of any item you want to recover. Give geographic coordinates of predicted impact area. Describe any beacon (radio or underwater), lights, dye markers, and other equipment on the item to be recovered. Describe any flotation characteristics and any built-in hooks, eyes, or similar fittings to which hoisting gear can be attached. Specify critical recovery time and any known hazards to recovering the item. If underwater recovery is desired or necessary, include the disposition arrangements after recovery and the security classification of item to be recovered.

***Meteorological
Services***

Describe the requirements for meteorological services, such as consultant and climatological services, forecasts, and observations.

***Environmental
Test Data***

List the environmental conditions to which you want to subject your test item.

***Other
Requirements***

State other special technical requirements which have not been covered, such as the preparation of a specially instrumented test area and the design, installation, maintenance, and operation of instrumented land and water payloads.

LOGISTICAL REQUIREMENTS

Maintenance Support for Customer Provided Aircraft

Aircraft Support

Aircraft provided by the customer and brought to the Space Port for test support are expected to be supported by crew chiefs and specialists from the aircraft's home station. In all cases, the home station must support maintenance requirements. There is an FBO on site with limited capabilities. (Including fuel)

AGE Requirements

In stating aircraft ground equipment (AGE) requirements, identify by type and quantity, cooling unit, generator, hydraulic mule, light-all, tug and tow bar, maintenance stands, aircraft jacks, engine dolly, air compressor, etc., required for flight line aircraft support. AGE is provided on a non-dedicated basis (24 hours or less) according to test priorities, and there are additional fees for the use of Space Port AGE.

Aircraft Support Equipment

Aircraft support equipment is provided on a dispatch, nondedicated basis according to test priority. Nonpowered support equipment must be picked up and returned by the user. Be aware that support is limited to the type of aircraft and systems maintained at Columbus Municipal Airport. The home stations of all aircraft deployed to the Space Port are expected to provide their own repair and maintenance capabilities.

Hangar Space

Specify hangar space required for aircraft and the reason for hangar space requirement. Hangar space at Columbus is limited and can be committed only in situations which have been assigned a very high priority. Requests for hangar space must be thoroughly justified and are subject to review and approval by the Space Port.

Petroleum, Oil, and Lubricants (POL)

Indicate type and quantity of fuel required for the test. Jet A and AVGAS fuel is readily available for aircraft and support equipment. JP-8 or other fuels are not used in normal Space Port operations, and if required, arrangements must be made for procuring, storing, and dispensing these fuels. Detailed fuel analysis is not available at the Space Port; however, this service can be arranged. Requirements for diesel fuel, automotive gasoline, bottled gases, grease, oils, and other lubricants must also be identified.

Supply Items

Identify all known requirements for supply items. Specify any supplies of this nature that you expect to be provided or acquired for you.

Equipment

Identify all equipment required to conduct the test including computers, reproduction copiers, and test equipment which you cannot provide (not to include AGE, which is addressed under Maintenance Support). Most shop equipment such as rectifiers (28-volt), test sets, oscilloscopes, etc., is available from the Space Port test support resources. If such equipment is required, your PE can assist you in securing equipment.

Transportation

If you want us to provide vehicles for your use, please specify type, number, and length of time vehicles will be required for the test. Special purpose vehicles such as jeeps, tractors, etc., are not available for dedicated test use. If vehicles are not available for your use, rental vehicles can be provided at your expense. Government-owned vehicles (GOVs) can be provided to military and federal civilians only. Contractor personnel are not authorized GOVs unless expressly stated in their contract.

***Shipping
Customer-owned
Property***

Identify shipping and receiving requirements. When shipping customer-owned property other than munitions to the Space Port use the following address:

Space Port Indiana, Inc.
Space Port Centre
4770 Ray Boll Blvd.
Columbus, Indiana 37203
MARK FOR: (applicable JON)
ATTN: (Test Engineer's Name, Office, and Phone Number)

Please provide us a shipping address for those items you want returned to you.

***Packing and
Crating***

Please state packing and crating requirements, if known. Packing and crating will be provided at customer expense.

***Civil
Engineering***

Specify support required in the following areas: heavy equipment support, facilities modification/construction, portable toilets, dumpster rental, janitorial services, or fleet service.

Office Space

When requesting office space, indicate required number of desks, chairs, filing cabinets, storage cabinets, safes, etc.

Shop Space

When requesting shop space, consider the dimensions of the test item and supporting equipment, and specify if ground floor space with large door access is required. Indicate power requirements, work benches, storage cabinets, shelves, chairs, overhead hoist, environmental control, lighting level, etc.

Communications

Identify on-base telephone, fax, cell phone, and data line requirements. All long distance calls made from these telephones will be charged to your test. Contractor personnel must make arrangements with local company for long-distance service.

Medical Service

The hospital in Columbus will provide emergency medical treatment for personnel. The hospital will determine the extent of treatment to be provided. Requirements such as standby ambulance service, physical exams, pharmaceutical requirements, laser eye exams, etc., should be identified. Support in these areas will be negotiated on a case-by-case basis.

SAFETY REQUIREMENTS

Early Contact

Establish contact with the Range and Systems Safety Section of the Space Port Safety Office as early as possible to determine test feasibility and possible requirement for a flight termination system.

Test Item Description

Complete detailed data on the test item, test conditions, scope of effort, release or launch parameters, lasers, radiating devices, aircraft configurations, flight termination system, and any known environmental issues is required by our Safety Office before testing can begin to insure that the test can be conducted at our facility.

Weapon/Vehicle Safety

For flight of aerodynamic and powered weapons, vehicles and drones, the Safety Office requires range safety data that includes the aerodynamic capabilities, maximum energy footprints, explosive hazard radius, probable failure modes and resulting footprints, system safety hazard analysis and any previous system safety approval actions. If a flight termination system is necessary, longer lead time and detailed design data and analysis are required.

Health Hazard Analysis

An occupational health hazard analysis is required for all test programs conducted at the Space Port. This analysis requires information on possible physical hazards including proposed uses of toxic (chemical or explosive) or irritating materials, radiating devices, radio frequency (RF) emitters, lasers, etc., and on the possibility of harmful noise generation.

Aircraft Compatibility Data

If you intend to use US aircraft in your test, flight clearances are required for all aircraft which have not been previously cleared for flight. Your PE can assist you in getting this request to the proper place.

SECURITY REQUIREMENTS

Computer Security

Approval will be required for test programs that will require processing of classified or unclassified data on a computer supplied by you, your supporting agencies, or your contractors at the Space Port. You should provide a list containing the number of computers that will be used, the types/manufacturers, serial numbers, software installed and peripherals.

Physical Security

Please state requirements for guard(s) or storage safe(s).

Security Classification (SCG)

SCGs provide guidance for classifying the items and materials and should be made available to Space Port test personnel. Security classification guides or classification/declassification guidance for any intermediate or final data must be provided before we can finalize test documentation.

Access to Test Sites/ Facilities/Ranges

If access is required by your personnel, you will be required to initiate visit requests asking for access.

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SPECIAL PLANNING GUIDANCE

Include information not covered elsewhere that will help prepare for and conduct the test. Examples of this kind of information follow:

Deficiency Reports

If deficiency reporting is desired, identify the applicable test items, contact point, addresses, and handling instructions.

Reliability and Maintainability

If your test requires us to collect reliability and maintainability (R&M) data, list and define the reliability parameters that must be measured. Include the ground rules for the definitions of system failure, start and stop times, bench time versus flight time, etc. If a specific reliability requirement is to be demonstrated during the test, provide the pass/fail criteria. If a reliability growth plan is in effect, provide the curves or interim criteria applicable to our testing portion. State whether use of the system effectiveness data system (SEDS) is desired.

List and define the maintainability parameters that are to be assessed and the criteria applicable to each. State whether contractor or Air Force maintenance is planned at the organizational and intermediate levels. Indicate the status of support equipment, technical data, special tools, and other Integrated Logistics Support elements that will affect a maintainability assessment.

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Environmental Documentation

An analysis of testing impact on the human, cultural, and natural environment is made for every program conducted at the Space Port. Sufficient information about the testing is required by the Space Port Indiana™ programming engineer (PE) to permit identification of any potential impacts to the environment and any special procedures that may be required in carrying out the test. We strongly recommend early environmental impact analysis planning with us to discuss the environmental issues that your program may present.

Environmental Impact Analysis

The program engineer also includes a complete description of the proposed action, alternatives to the proposed action, and submits this request through the Space Port to the EPA. As appropriate, the analysis request should reference previous environmental impact analysis completed for similar actions conducted at any other facility. For proposed test activities that continue or are similar to actions conducted at locations other than the Space Port, copies of environmental impact analysis for the other locations should be provided as attachments to the analysis request to facilitate environmental reviews. The test customer should be prepared to present pertinent environmental assessment documents related to the proposed test to the Space Port.

Three Potential Outcomes

After submission and evaluation of environmental impact documents, there are three potential outcomes.

1. An analysis request for an action that corresponds to one of the 38 standard Categorical Exclusions (CATEXs) with no complicating factors can usually be processed and returned to the Space Port on an average of 10 days or possibly less.
2. However, some requests are complex and require field visits, negotiations on required mitigation's, etc., and will exceed the average turnaround time of 10-14 days.
3. Requests for analysis that do not fit a CATEX will require preparation of an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). An EA typically requires 6 or 9 months to a year to complete and typically costs from \$8,000 to approximately \$50,000 or more. An EIS may take 18 months or, more typically, 2 years and may cost in excess of a million dollars.

***Geographic
Information
System***

Another project currently being fielded is the Space Port Geographic Information System (GIS). This computerized system displays the most complete and accurate data available about our ranges. Our mission planners now have the tools with which to manage the potential environmental impacts the program may have, thereby possibly reducing review time and potential for costly and time-consuming delay.

***Value of
Environmental
Pre-Planning***

The value of including environmental considerations as early as possible in your planning process cannot be overstated. Significant savings in time and resources can readily be achieved by following the advice found through this document. Customers are strongly encouraged to provide the Space Port planning team with any previous environmental impact analysis documentation or relevant technical reports to aid in accomplishment of the analysis.

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Abbreviations/Acronyms

AGE	Aerospace Ground Equipment
ATCAA	Air Traffic Control Assigned Airspace
CATEX	Categorical Exclusions
C2	Command and Control
COMPUSEC	Computer Security
COMSEC	Communications Security
COMM	Communications
CONUS	Continental United States
DoD	Department of Defense
EA	Environmental Assessment
EPA	Environmental Protection Agency
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
EOD	Explosive Ordnance Disposal
FAA	Federal Aviation Administration
FTS	Flight Termination System
GOV	Government
HALE	High Altitude Long Endurance
ISS	International Space Station
JON	Job Order Number
MOA	Military Operating Area
MOT	Method of Test
MRTFB	Major Range and Test Facility Base
MTR	Military Training Routes
OPSEC	Operations Security
OCONUS	Outside Continental United States
PE	Programming Engineer
POL	Petroleum, Oil, and Lubricants
PMP	Program Management Professional
PTO	Participating Test Organization

R&M	Reliability and Maintainability
RF	Radio Frequency
ROM	Rough Order of Magnitude
RTO	Responsible Test Organization
SCG	Security Classification Guide
SEDS	System Effectiveness Data System
SOC	Statement of Capability
SOP	Standard Operating Procedures
SOW	Statement Of Work
TAL/IC	Test Acceptance Letter/Initial Contact
T&E	Test and Evaluation
TEO	Test Execution Organization
TD	Test Directive
TE	Test Engineer
TW	Test Wing
UAS	Unmanned Air System
US	United States
WAG	Wild Assuming Guess
WBS	Work Breakdown Structure
WNS	Wide Network Sensors