



## DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AIR FORCE MATERIEL COMMAND  
WRIGHT-PATTERSON AIR FORCE BASE OHIO

MEMORANDUM FOR SEE DISTRIBUTION

FROM: HQ AFMC/A3

4375 Chidlaw Road

Wright-Patterson AFB OH 45433-5001

SUBJECT: Interim Test and Evaluation (T&E) Policy Guidance on AFMC Lead Developmental Test Organization (LDTO) Designations and Waivers

1. Director's Intent. DoDI 5000.02 and AFI 99-103 were recently revised to incorporate LDTO designation as a result of USC Title 10 § 139b implementation. The LDTO, formerly called the Responsible Test Organization (RTO), functions as the lead integrator for a program's DT&E activities IAW AFI 99-103, paragraphs 2.2 and 2.3. This memorandum provides interim policy guidance to clarify LDTO designations and waivers.
2. Applicability. This guidance is applicable to all AFMC organizations and all AFMC managed projects/programs to include non-ACAT modifications. For non-ACAT modifications, the program office is required to develop and document a test strategy IAW AFI 63-131, paragraph 4.4.1.7 and AFI 99-103, paragraphs 2.2.10 and 3.15.7. ACAT equivalency for non-ACAT modifications will be determined using ACAT definitions IAW DoDI 5000.02 and based upon the amount of funding allocated to development and procurement without regard to the acquisition category of funding used. FMS programs are required to be implemented IAW the 99-series test AFIs per AFI 63-101/20-101, paragraph 4.26.
3. LDTO Selection. Typically, an appropriate LDTO will be selected from the list of LDTO candidates in [Enclosure 1](#). The LDTO selection process is described in a logic diagram in [Enclosure 2](#). LDTO designations will be documented on the form in [Enclosure 3](#). Program offices will coordinate LDTO packages with the Center Test Authority, TestRep (if applicable) and their proposed LDTO prior to submission to HQ AFMC/A3. LDTO nominations will then be coordinated with HQ AFMC/A3 before submission to the PEO for final selection. If an appropriate LDTO is not on the list in [Enclosure 1](#) as defined in AFI 99-103, paragraph 4.5.2, integrated test teams (ITT) may propose an alternate LDTO. In this case, the LDTO package will include the form in [Enclosure 3](#) and documentation of how the proposed LDTO meets the criteria in [Enclosure 4](#) to assume the test oversight responsibilities outlined in AFI 99-103, paragraph 3.17.
4. No-LDTO Option. When using the "No-LDTO Option" in AFI 99-103, paragraph 4.5.4., an alternate organization must still be designated to perform and/or oversee the functions described in AFI 99-103, paragraph 3.17. "No-LDTO Option" packages will follow the same staff routing described in paragraph 3 and will include the form in [Enclosure 3](#) and documentation to address the questions in [Enclosure 5](#).

5. Blanket Designations. A “Blanket” designation letter refers to a situation where a single, unique LDTO or “No-LDTO Option” organization is designated to provide T&E oversight for multiple programs with similar mission profiles/test requirements. Multiple programs are combined into a single “Blanket” recommendation letter to the PEO. In these situations, all proposed programs and organizations will meet the policy guidance contained in this memorandum. “Blanket” designations will not exceed 2 years.

6. Waivers. LDTO designations for MDAP programs are a statutory requirement governed by DoDI 5000.02 and cannot be waived by the USAF. Waivers are required if any provisions of AFI guidance or policy cannot be met in the pursuit of an LDTO or No-LDTO designation. Waiver requests to LDTO policy in AFI 99-103 shall comply with AFI 33-360, paragraph 1.9 and include the information described in [Enclosure 6](#). Non-tiered waivers will be staffed, in turn, from the PM to the CTA, to the PEO to HQ AFMC/A3, then to the waiver authority, AF/TE. Depending on the nature of the waiver request, programs will still submit Enclosure 3, 4 and/or 5 (as applicable) to designate LDTO or No-LDTO option.

7. This policy is effective immediately and will remain in effect for 1 year from the signature date or until superseded by publication of the AFMC Supplement to AFI 99-103. Questions on this action can be directed to HQ AFMC/A3F Workflow, [AFMC.A3F.Workflow@us.af.mil](mailto:AFMC.A3F.Workflow@us.af.mil) or [AFMC.A3F@afmc.af.smil.mil](mailto:AFMC.A3F@afmc.af.smil.mil).



CATHERINE A. CHILTON  
Major General, USAF  
Director, Air Space and  
Information Operations

**Enclosures (6)**

1. LDTO Candidate List
2. LDTO Selection Process
3. AFMC LDTO Designation Form
4. Data Required for Selection of an LDTO Not On the LDTO Candidate List
5. No-LDTO Option
6. LDTO Waivers

Distribution:

SAF/AQ

AF/TE

AFSPC/A5

HQ AFMC/EN

HQ AFMC/IG

HQ AFMC/JA

AFLCMC/CC

AFNWC/CC

AFRL/CC

AFSC/CC

AFTC/CC

AFLCMC/EB

AFLCMC/HB

AFLCMC/HI

AFLCMC/HN

AFLCMC/LP

AFLCMC/SS

AFLCMC/WF

AFLCMC/WI

AFLCMC/WK

AFLCMC/WL

AFLCMC/WN

AFLCMC/WW

AFPEO/JSF

SAF/AA

SAF/CM

SMC/CC

AFLCMC/AQT

AFNWC/ENT

AFRL/DO

AFTC/XP

## Enclosure 1

### LDTO Candidate List

Test Capability	LDTO
<b>Air Armament Testing</b>	AFTC (96 TW / 412 TW / AEDC)
<b>Aircrew Training Systems Testing</b>	AFTC (96 TW / 412 TW)
<b>Airframe Testing</b>	AFTC (412 TW / AEDC)
<b>Armament Integration Testing</b>	AFTC (96 TW / 412 TW / AEDC)
<b>Avionics Testing</b>	AFTC (96 TW / 412 TW)
<b>Battlelab/Warfighting Environment Testing</b>	AFTC (96 TW / 412 TW)
<b>C4ISR Testing</b>	
Development	AFTC (96 TW)
Integration	AFTC (96 TW / 412 TW)
<b>Chemical/Bio Testing</b>	AFTC (96 TW)
<b>Cyber Testing</b>	AFTC (96 TW / 412 TW)
<b>Engine Testing</b>	
Installed	AFTC (412 TW)
Uninstalled	AFTC (412 TW / AEDC)
<b>Electronic Warfare Testing</b>	AFTC (96 TW / 412 TW)
<b>Information Technology Systems</b>	AFTC (96 TW) AFLCMC/HNIZ(CIE)
<b>Foreign Military Sales Testing</b>	AFTC (96 TW / 412 TW)
<b>Laboratory Testing</b>	AFTC (96 TW / 412 TW / AEDC)
<b>Munitions/Munitions Handling Testing</b>	AFTC (96 TW / 412 TW / AEDC) AFLCMC/EZPT – Hill CTA*
<b>Performance and Flying Qualities</b>	AFTC (412 TW)
<b>Radar Cross Section Measurement / Low Observable Testing</b>	AFTC (96 TW / 412 TW / AEDC)
<b>Rocket Motor Testing</b>	
Altitude	AFTC (AEDC)
Ground Level	582 MMXS

## Enclosure 1

### LDTO Candidate List (Cont.)

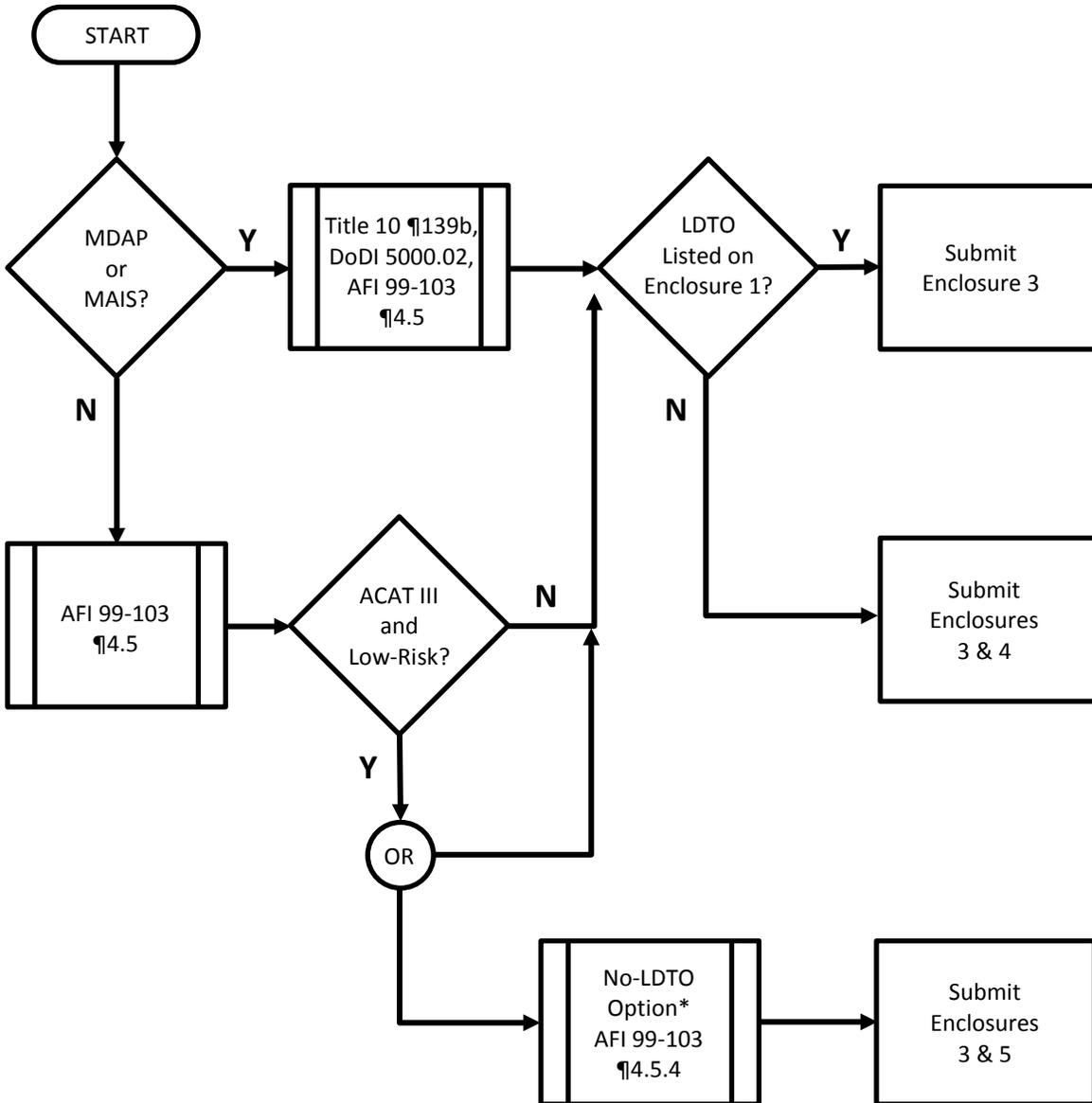
Test Capability	LDTO
<b>Special Projects Testing</b>	AFTC (96 TW / 412 TW / AEDC) 645 AESG
<b>Support Equipment Testing</b> Automatic Test Equipment (ATE) Vehicles	AFLCMC/EZPT – Hill, Robins CTA * AFLCMC/EZPT – Robins CTA *
<b>Sustainment/OFP Testing</b>	
Bomber	AFTC (412 TW) AFLCMC/EZPT – Tinker CTA *
Fighter	AFTC (96 TW / 412 TW) AFLCMC/EZPT – Hill, Robins CTA *
Helicopter	AFTC (96 TW / 412 TW) AFLCMC/EZPT – Robins CTA *
Intelligence, Surveillance, and Reconnaissance	AFTC (96 TW / 412 TW) AFLCMC/AQT – WPAFB CTA * AFLCMC/EZPT – Hill, Robins CTA *
Mobility	AFTC (96 TW / 412 TW) AFLCMC/EZPT – Hill, Robins, Tinker CTA *
Munitions	AFTC (96 TW) 582 MMXS AFLCMC/EZPT – Hill CTA *
Special Operations Forces (SOF)	AFTC (96 TW) AFLCMC/EZPT – Robins CTA *
Tanker	AFTC (412 TW) AFLCMC/EZPT – Tinker CTA *
Trainer	AFTC (412 TW) AFLCMC/EZPT – Hill, Tinker CTA *

\* *Center Test Authorities (CTA) should only be designated for tests of the type and scope normally not conducted by the Air Force Test Center due to their limited cost and risk. These tests organizations are tasked to establish processes and maintain/manage requisite capabilities to conduct low risk, low cost, short duration developmental T&E (DT&E), qualification T&E (QT&E), and sustainment testing on legacy systems that their complex supports.*

**Note:** *For all programs planning to identify the AFTC or one of its sites (AEDC, 96TW, or 412TW) as their LDTO, the LDTO will be the AFTC and the organization executing the test will be the appropriate site, to include the testing squadron if known. Samples of designation format: AFTC (96 TW / 413 FLTS) or AFTC (412 TW / 418 FLTS).*

## Enclosure 2

### LDTO Selection Process



\* **Note:** AFI 99-103, paragraph 4.5.4 defines the No-LDTO option as, “An alternate [e.g. non-test] organization [e.g. System Program Office] may be designated in lieu of an LDTO to perform and/or oversee the functions described in paragraph 3.17.” This is not a request to proceed without an organization performing these test oversight responsibilities.

## Enclosure 3

### AFMC LDTO Designation Form

<b>LEAD DEVELOPMENTAL TEST ORGANIZATION (LDTO) DESIGNATION</b>		
<b>1. Test Project Title:</b> Program/Project Title	<b>2. LDTO:</b> Nominated LDTO or No-LDTO Option (id Org)	<b>3. CTA Test Project Number:</b> CTA will enter
<b>4. Program Office:</b>	<b>5. Type of Designation:</b> LDTO <input type="checkbox"/> No-LDTO Option <input type="checkbox"/> Blanket LDTO <input type="checkbox"/>	<b>6. Blanket Expiration Date:</b> If applicable
<b>7. Funding Organization:</b> Organization providing funding to LDTO	<b>8. User/End Customer:</b>	<b>9. Prime Contractor:</b>
<b>10. Program Status:</b> <input type="checkbox"/> MDAP <input type="checkbox"/> MAIS <input type="checkbox"/> FMS      ACAT: <input type="checkbox"/> I/IA <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> N/A      OSD T&E Oversight: <input type="checkbox"/> DT <input type="checkbox"/> OT <input type="checkbox"/> LF <input type="checkbox"/> N/A		
<b>11. Program/Project Background:</b> (Continue in Block 18 if required) Brief background of what the program/project requirement is & what generated it: <ul style="list-style-type: none"> <li>- Identify it as an ACAT program, if applicable, and provide references to ASP/MS decisions and/or TES/TEMP documents.</li> <li>- Identify the program/project source requirements document (i.e. 1067, ICD/CDD, etc.).</li> <li>- Identify any prior programs/projects and related testing/demonstration.</li> <li>- Identify any similar uses (i.e. other aircraft)</li> <li>- Identify prime contractor and related documents (i.e. PWS, SOW)</li> <li>- Identify the last milestone completed and/or current acquisition phase.</li> </ul>		
<b>12. Test Article/System Under Test Description:</b> (Continue in Block 18 if required) Brief description of test article/SUT: <ul style="list-style-type: none"> <li>- Identify system configuration, to include how it interfaces with the host platform</li> <li>- Identify software change requests and their purpose (if applicable)</li> <li>- Identify any item/sub-system/LRU-level testing accomplished (i.e. MIL-STD-461 for EMI, MIL-STD/810 for Environmental)</li> </ul>		
<b>a. AFI 63-131 Test Article/System Under Test Configuration:</b> Will testing be done as a T-2, T-1, or permanent mod?		
<b>13. Overall Developmental Test Objective:</b> (Continue in Block 18 if required) Identify general test objective including compatibility (i.e. EMI/EMC, regression) and/or functionality (i.e. intended purpose). List types of testing to be executed and any special resources, equipment or expertise required to accomplish it. Specific test objectives are usually coordinated with test organization thru the Program Introduction/Program Introduction Document (PI/PID) or Test Request Letter. Identify if DT testing will be combined with OT and/or any contractor testing.		
<b>a. Test Requirement Source Document:</b> i.e. ICD/CDD, AF Form 1067, approved TES/TEMP		
<b>b. Security Classification:</b> To include test article, test procedures, collected data, test report distribution		
<b>c. Test Interdependencies:</b> What other testing is tied to this test project (i.e. prior SIL, contractor, other programs/projects, etc.)?		
<b>d. Test Project Schedule Drivers:</b> Is there anything driving the test schedule (i.e. aircraft availability, other testing, contract POP)?		
<b>e. Desired Test Start Date:</b> When do you need LDTO to start testing? <b>Desired Test Completion Date:</b> When do you need LDTO to finish testing?		
<b>f. Operational Test Agency/Organization (OTA/OTO):</b> Has MAJCOM identified one? If not – N/A		
<b>g. Participating Test Organizations (PTO):</b> Other test organizations supporting the LDTO		

## Enclosure 3

### AFMC LDTO Designation Form (Cont.)

**14. Preliminary Test Technical Risk Level and Assessment:** (Continue in Block 18 if required) LOW  MEDIUM  HIGH   
 Technical test risk is the ability to conduct testing that will provide data needed (i.e. test article/test support assets/instrumentation/range limitations). Identify your IPT/ITT/TIPT's preliminary technical risk as it pertains to required testing and provide corresponding justification, to include planned risk mitigation. Factor in any previous similar testing accomplished by the LDTO. Double click to select the appropriate level of risk assessed.

**15. Preliminary Test Safety Risk Level and Assessment:** (Continue in Block 18 if required) LOW  MEDIUM  HIGH   
 Test safety risk is the ability to safely conduct testing without injury to personnel or damage to equipment. Identify your IPT/ITT/TIPT's preliminary safety risk as it pertains to required testing and provide corresponding justification, to include planned risk mitigation and mishap investigation responsibility. For tests involving aircraft, identify aircraft possession (i.e. AFMC vs. MAJCOM). Your system safety officer can provide a means to identify the risk (i.e. IAW MIL-STD-882D). Double click to select the appropriate level of risk assessed.

**16. Justification of Proposed LDTO:** (Continue in Block 18 if required)  
 Provide ITT justification for choosing the proposed LDTO, if multiple LDTO's were available. Include justification for the proposed organization which makes it the best option for the USAF. List the organizations from the A3 LDTO Candidate List, which were considered, but not selected, and justification for each decision.

**17. Coordination and Approval:** (Place any Comments in Block 18)

CDT or Test Manager:	Organization & Phone:		Signature:	Date:
Name & Grade	AFXXX/xxxxx; XXX-XXX			
LDTO or Alternate Organization Rep:	Organization & Phone:	Concurrence:	Signature:	Date:
Name & Grade	AFXXX/xxxxx; XXX-XXX	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Chief Engineer:	Organization & Phone:	Concurrence:	Signature:	Date:
Name & Grade	AFXXX/xxxxx; XXX-XXX	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Program Manager:	Organization & Phone:	Concurrence:	Signature:	Date:
SPM Name & Grade	AFXXX/xxxxx; XXX-XXX	Yes <input type="checkbox"/> No <input type="checkbox"/>		
AFTC TESTREP (if Applicable):	Organization & Phone:	Concurrence:	Signature:	Date:
Name & Grade	AFXXX/xxxxx; XXX-XXX	Yes <input type="checkbox"/> No <input type="checkbox"/>		
CTA Chief:	Organization & Phone:	Concurrence:	Signature:	Date:
Name & Grade	AFXXX/xxxxx; XXX-XXX	Yes <input type="checkbox"/> No <input type="checkbox"/>		
HQ AFMC/A3:	Organization & Phone:	Concurrence:	Signature:	Date:
Name & Grade	AFXXX/xxxxx; XXX-XXX	Yes <input type="checkbox"/> No <input type="checkbox"/>		
PEO:	Organization & Phone:	Concurrence:	Signature:	Date:
Name & Grade	AFXXX/xxxxx; XXX-XXX	Yes <input type="checkbox"/> No <input type="checkbox"/>		

After the PEO approves the selection, the PM notifies HQ AFMC/A3 and the program element monitor (PEM) within 30 days.

**18. Coordination/Approval Comments and Continuation**

## Enclosure 4

### Data Required for Selection of an LDTO Not On the LDTO Candidate List

If an appropriate candidate LDTO with relevant mission/test expertise is not available on the LDTO Candidate List, submit the following with the proposed LDTO nomination package for HQ AFMC/A3 coordination and PEO approval:

1. Does the proposed LDTO possess a documented process for the test planning function, to include a technical review, safety review, risk assessment and test hazard analysis of the program prior to test execution?
2. Does the proposed LDTO possess a documented process for accomplishing test execution?
3. Does the proposed LDTO possess a documented process for providing timely test results and deficiency reporting?
4. Does the proposed LDTO have documented evidence of possessing (or having access to) the appropriate manpower and resources necessary to accomplish test planning, test execution and the test reporting functions?
5. Does the proposed LDTO possess a qualified workforce with the requisite mission experience, T&E APDP or DoDI 8570 (for DBS systems) credentials and management expertise required to accomplish the proposed tests?
6. Does the proposed LDTO possess, or have access to, the required test resources to thoroughly evaluate the system under test?
7. Does the proposed LDTO have the capability and capacity to accomplish the responsibilities described in AFI 99-103, paragraph 3.17? Has the LDTO agreed to accept the test effort?
8. Is the proposed LDTO an inspectable unit, subject to compliance inspections by AFMC/IG or other Air Force or DoD inspection processes?
9. Is the proposed LDTO an independent and unbiased organization removed from any conflict-of-interest with the program office requesting the test support? Does the LDTO report to a management chain outside the PEO for the SUT? If not, describe the degree of independence that exists.
10. For PTO and contractor testing, does the proposed LDTO have the ability to adequately manage and oversee their test planning, execution and reporting?
11. List the organizations from the LDTO Candidate List ([Enclosure 1](#)), which were considered, but not selected, and justification for each decision.

## Enclosure 5

### No-LDTO Option

All proposed No-LDTO designation submissions will be accomplished IAW AFI 99-103, section 4.5.4 and should include the following general/background information. This information will be included in Block 18 of the LDTO designation form ([Enclosure 3](#)) or it can be addressed in separate documentation.

1. Show how all responsibilities in AFI 99-103, paragraph 3.17 will be fulfilled by your alternate test organization, chosen in lieu of an LDTO.
2. Explain the degree of independence of the proposed organization from the PEO chain-of-command. Independence is highly desired in order to achieve the objectivity described in AFI 99-103, paragraph 1.3.6.
3. Explain justification for how use of the proposed organization will not adversely limit mission/program effectiveness or efficiency and how it was assessed to create a low risk of mission/program failure.
4. Explain which organization will conduct technical and safety reviews required by AFI 99-103, paragraph 5.19 and describe the procedures that will be used to accomplish these reviews prior to commencement of test activities.

## **Enclosure 6**

### **Waivers to AFI 99-103 LDTO Policy**

Waivers are required if any provisions of AFI guidance or policy cannot be met in the pursuit of an LDTO or No-LDTO designation. Non-tiered waivers will be staffed from the PM, to the CTA, to the PEO, to HQ AFMC/A3, then to the waiver authority, AF/TE. Time periods for waivers issued will be limited based on the approver's determination. The waiver period must be identified in the approval message. Additionally, all proposed waiver submissions should contain the following general/background information specified by AFI 33-360, Paragraph 1.9:

1. Show the reference and text of the specific Air Force or AFMC instruction requirement for which the commander or director is requesting a waiver.
2. Rationale for the waiver IAW AFI 33-360, Paragraph 1.9.1.
3. Time period or circumstance for which the waiver will be required.
4. Risk mitigation measures the requesting commander will implement during the waiver period.
5. Impact if waiver is disapproved.
6. State what kinds of workforce skills, RDT&E facilities, analytical and M&S capabilities, and timeframe you need for completing your development program.
7. State why your program is unique and why the resources are difficult to locate or use.