

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION

1. Agency, Contracting Activity and Document

The National Science Foundation, Division of Contracts, Policy, and Oversight proposes a Justification for Other Than Full and Open Competition (JOFOC) for Antarctic Basler Turbo-67 Airlift Services. The U.S. Department of Interior, Office of Aircraft Services (OAS) will accomplish this acquisition.

2. Action Being Approved

The action to be approved is the solicitation and award of a contract to Leading Edge Aviation Services of Missoula, Montana to provide medium-lift, medium range airlift services using a ski-equipped Basler Turbo-67 fixed-wing aircraft.

3. Description of Services

The vendor will provide medium-lift, fixed-wing air logistic support to the United States Antarctic Program (USAP). The NSF anticipates awarding a maximum 45-day contract for the above airlift services. The NSF is looking to fill its medium-lift, medium-range, short-term airlift requirement using a single ski-equipped, turbine propulsion DC-3 aircraft. A 30-45 day availability of this aircraft is required, sometime in the window of mid-November 2000 to mid-January 2001 in Antarctica. The utilization period may be split. Total flying time is anticipated to be 200-250 flight hours. The turbo DC-3 will operate from skiways, both prepared and unprepared, i.e., open field and from remote fields with no skiways. Up to nine passengers will be carried in combination with bulk cargo. Cargo loads will consist of scientific and general field support equipment needed to facilitate research at remote field locations. Airlift "cargo/range" requirements are: (i) 5,000 pounds (± 400 pounds) with an operating radius of 250 nautical miles and 45 minute fuel reserve; (ii) 4,000 pounds (± 300 pounds) with an operating radius of 400 nautical miles and 45 minute fuel reserve; (iii) 3,000 pounds (± 200 pounds) with an operating radius of 525 nautical miles and 60 minute fuel reserve; and (iv) 2,000 pounds (± 100 pounds) with an operating radius of 700 nautical miles and 60 minute fuel reserve. Other required performance parameters are:

- Aircraft maximum range: (i) 2,000 nautical mile maximum range with 45 minute fuel reserve using long range fuel tanks; and (ii) 1,000 nautical miles with standard tanks;
- Capability to load an LD3 container through the main cargo door;
- Capability to load five LD3 containers;
- Cabin volume of not less than 1,200 cubic feet;
- Single engine operational ceiling of not less than 13,000 ft at maximum weight;
- Passengers: (i) nine minimum; and (ii) nineteen maximum; and
- Maximum conversion time from cargo to passenger configurations, 30 minutes.

The estimated value of this acquisition is \$210,000.

4. Statutory Authority

The statutory authority permitting other than full and open competition is 41 U.S.C. 253 (c)(1), as implemented at FAR Part 6.303-1. Leading Edge is the only responsible source that can provide these services.

5. Contractor's Unique Qualifications

Both the Office of Aircraft Services and Raytheon Polar Services Company (RPSC), at NSF's request, have conducted market research attempting to find a vendor capable of meeting the required services as described in paragraph three. After making several telephone and other contacts within the aviation industry, both organizations have confirmed that Leading Edge is the only Federal Aviation Regulation Part 135 (135) certificated operator of a ski-equipped Basler Turbo-67 aircraft. While there are other operators of BT-67 aircraft around the world, there are no other certificated vendors operating them off skis.

The aircraft has been operated in support of both private and other national programs in Antarctica, having successfully operated from its Patriot Hills aerodrome during the 1999-2000 austral summer season.

At present, Leading Edge Aviation Services is the only certificated vendor operating a ski-equipped BT-67 aircraft in Antarctica. However, this is due to the fact that it is the only vendor with the experience and market for this type of specialized aircraft.

6. Efforts Made to Obtain Competition

NSF published a sources sought synopsis in the Commerce Business Daily (CBD) on July 5, 2000 (refer to CBDNet W-187, SN471516). Subsequently, a follow-on synopsis was posted on August 3, 2000 (refer to CBDNet W-216, SN482011) providing clarification on desired aircraft capabilities and specifications. No responses were received to these synopses.

In addition to the CBD synopsis, NSF made inquiries about the possibility of BT-67 availability through Kenn Borek Air (KBA), the current provider of twin otter aircraft to the USAP under contract with Raytheon Polar Services Company. Although KBA did express an initial interest in potentially providing similar services using a DC-3 aircraft, the potential contract value did not warrant modification of the KBA DC-3 aircraft to meet the specifications of the CBD announcement.

KBA currently operates a ski-equipped DC-3 aircraft in remote locations in Canada. However, the KBA aircraft has radial engines and would require aviation-grade gasoline, which is not available through the USAP in Antarctica. KBA indicated they would consider modifying the aircraft for use in the Antarctic (e.g. re-engined with turboprops), but that this would only be cost-effective if the aircraft were to be used on a long-term basis.

As stated in items 9 and 11, it is anticipated that a wider vendor response would be received if a multi-year solicitation for BT-67 services were released. The services requested in item 3 would form the basis from which the determination of long-term use of BT-67 aircraft would be made.

7. Determination of Fair and Reasonable Price

The Contracting Officer will perform cost and price analysis to determine that the proposed prices will be fair and reasonable.

8. Market Survey

As previously stated in item 5, market surveys were conducted through RPSC and OAS. The latter confirmed that Leading Edge Aviation Services of Missoula Montana is currently the only 135 certificated operator of a ski-equipped Basler Turbo-67 aircraft.

Additional market surveys were conducted through both CBDNet announcements as previously described in item 6 above.

9. Additional Information

NSF wishes to test the BT-67 aircraft under operational conditions in Antarctica to determine if the aircraft offers capabilities or efficiencies which would warrant long-term use by the USAP. At present, the USAP utilizes two types of fixed-wing skied aircraft in Antarctica: the Lockheed LC-130 Hercules and the DH-6 Twin Otter. The LC-130 is a very large, heavy lift aircraft, while the twin otter is a light-duty, light-lift aircraft, the principle advantage of which is its ability to operate from unimproved, short skiways in the deep field. For many deep field applications (e.g. remote field party put-ins), the LC-130 is larger than is required, but the twin otter is too small.

It is anticipated that the BT-67 will provide a “medium” airlift capability between the LC-130 and the twin otter. Although the US Navy operated similar ski-equipped aircraft in Antarctica from the late 1950’s to the mid-1960’s, there is very little information available regarding the capabilities of the aircraft and how well it is suited to the deep field mission. The turbine-engine BT-67 is a significantly different aircraft than the radial-engine DC-3 and R-4D aircraft operated previously by the US Navy. It is believed that the new engines will provide greater capabilities in the deep field. However, actual testing in the field is required before a determination of suitability can be made.

If the BT-67 proves itself in the field, the NSF will likely continue to employ the aircraft. In the long term this will mean including the specification for a BT-67 aircraft in the solicitation for fixed-wing aircraft services. In this case, it is anticipated that there will be a much broader response to the NSF solicitation, as a multi-year effort would justify the vendor expense of modifying or procuring aircraft to meet the specification.

The aircraft may also be useful in relieving scheduling pressure on the LC-130H’s due to the requirements of the South Pole Station Modernization project and the pending Ice Cube project, and help ameliorate the light-lift capacity shortfall anticipated this season. It is anticipated the BT-67 will successfully fill that void, but only field tests can confirm this.

Leading Edge is an experienced aircraft services provider with certified aircraft. They have indicated they can make the BT-67 available for the period that will support adequate testing of the full capabilities of the aircraft. This timing is very critical. The aircraft must be evaluated under weather conditions that are ephemeral and present only during certain periods of the season.

10. Other Sources Expressing an Interest

NSF received informal expressions of interest (via telephone and e-mail) from several organizations and individuals seeking additional information on the requirement. This resulted in a second CBD synopsis being published on August 3, 2000, summarizing required aircraft capabilities, and airfield capabilities. However, no qualification statements were submitted.

11. Removing Barriers to Competition

As stated previously, one purpose of this acquisition is to evaluate the BT-67 and its capability to provide necessary medium-lift services. The Government's market research indicated that only one ski-equipped aircraft of this type is presently available. However, the aircraft manufacturer and other interested parties indicated that if a long-term requirement resulted from this test, the significant expense of modifying an aircraft to operate on skis could be amortized over the contract period, thus removing a significant barrier to competition.

12. Certifications

Program Officer:

I hereby certify that the facts presented in this Justification are current, completed and accurate.

Mr. Brian W. Stone
Date

Director, OPP:

I hereby concur in this Justification.

Dr. Karl A. Erb
Date

Contracting Officer:

I assure that a detailed analysis will be performed on all proposed prices to assure that they are fair and reasonable. I also certify that this Justification is current, complete and accurate.

Mr. Dale H. Gaston, DOI/OAS
Date

Chief, Contracts Branch:

I hereby approve this Justification for Other than Full and Open Competition.

Mr. William A. Bryant
Date