July 19, 2005

Anthony Principi
Chairman
Defense Base Closure and Realignment Commission
2521 South Clark St., Suite 600
Arlington, VA 22202

Dear Chairman Principi:

As we stated at the St. Louis Regional Hearing, we believe that the decision to close General Mitchell Air Reserve Station (Mitchell) in Milwaukee, Wisconsin is not in the best interest of the United States Military. Furthermore, we are concerned that this decision might have been based on faulty and incomplete data as well as incorrect assumptions. Over the course of the next few days we will provide the Commission with the certifiable data that has led us to develop these conclusions.

In St. Louis we discussed the idea that Mitchell was being closed because of the desire of the active duty Air Force to recapitalize its C-130 fleet by taking the Reserve's newer model C-130s.

The following data forms the basis for our concern that the Air Force is using the BRAC process to accomplish this goal.

Air Force's Aging C-130 Fleet

A GAO report released in April 1998 (GAO/NSAID-98-108, page 1) states that the average age of the active duty C-130 fleet is 25 years, while the average age of the Guard and Reserve C-130 fleet is about 15 years (Attachment #1A/#1B - Complete GAO report).

Congressional Intent

The same GAO report (Attachment #1A, page 6, 7) stated:

- From 1978 to 1998 Congress directed the procurement of 256 C-130 aircraft for the Guard and Reserve. The Air Force did not request these aircraft.

- Congress put language in the 1998 Defense Authorization Act for Fiscal Year 1998 and the Defense Appropriations Act for the same year that *specifically prohibited the retirement of Guard and Reserve C-130 aircraft.* This decision was opposed by the Air Force when it came to managing its C-130 fleet.

According to Christopher Bolkom at the Congressional Research Service, from 1990 to 2005 Congress mandated the procurement of 50 C-130s for the Guard and Reserve (Attachment #2).

Based on the age of the active duty C-130 fleet compared to the age of the Guard and Reserve fleet, we are concerned that the Air Force may have viewed the BRAC process as a way to get around Congressional intent concerning management of C-130s.

Procurement of C-130J

- While Congress was mandating the purchase of C-130s not included in the President's budget for the Guard and Reserve, the active duty Air Force was facing the possibility of not being able to procure new C-130Js because of a DoD Inspector General Report that was released in July of 2004 that concluded the C-130J could not perform its intended mission, which jeopardized future purchases of the aircraft (Attachment #3)

- The President's budget request for FY06, which was released February 2005, cancelled the C-130J multi-year procurement contract (Attachment #4 - page 94, Senate Report 109-69).

By the series of events surrounding procurement of the C-130s, it is appears that the Air Force and Congress could not reach agreement on the management or size of the C-130 fleet. Contributing to the confusion regarding the C-130 fleet was the President's proposed cancellation of the C-130J procurement contract.

Base Closure Executive Group (BCEG) – Mitchell Last Minute Addition to BRAC in order to upgrade/modernize C-130 fleet

As recently as March 3, 2005, Mitchell was being discussed as a potential candidate to receive an additional 8 C-130s (See Air Force BCEG minutes from its January 25, February 7 and March 3, 2005 meetings).

Then, at the April 7, 2005 BCEG meeting, the Air Force recommended the closure of Mitchell.

In a June 25, 2005 *Buffalo News* article Major General Gary W. Heckman, Chairman of the Air Force's Base Closure Executive Group, is quoted as saying that the closure of Mitchell and Niagara Falls Air Reserve Station came as a late addition to the BRAC list, and were added because the Air Force had a goal of giving more C-130 cargo planes to the active-duty forces (Attachment #5 - *Buffalo News* article).

This series of events leads us to believe one of the reasons that Mitchell was added to the closure list was because it was a certain way for the active duty Air Force to modernize its fleet by taking planes from the Guard and Reserve.

Summary

Recapitalizing the active duty C-130 fleet by using the BRAC process is outside the scope of Congressional intent for both the purpose of BRAC and the management of the C-130 fleet. We are concerned these two issues played a role in the decision to close General Mitchell Air Reserve Station.

Thank you for your attention to this matter.

Sincerely,

Gov. Jim Doyle

Sen. Herb Kohl

Sen. Russ Feingold

Rep. Gwen Moore

Rep. Paul Ryan

Executive Correspondence
DCN 5781

United States General Accounting Office

GAO

Report to the Honorable
John McCain, U.S. Senate

April 1998

INTRATHEATER AIRLIFT

Information on the Air Force's C-130 Aircraft

GAO/NSIAD-98-108

GAO

United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-274598

April 21, 1998

The Honorable John McCain
United States Senate

Dear Senator McCain:

This report responds to your August 1997 request for information on the Air Force's C-130 program. Specifically, you asked us to answer the following questions.

- What is the mission of the current and planned C-130 fleet?
- What are the C-130 requirements for the Air National Guard and Air Force Reserve?
- What is the C-130 procurement history in the Guard and Reserve units?
- What are the Air Force plans for retiring excess C-130s in the Master Stationing Plan (MSP)?
- Is the Air Force's process for retiring C-130 aircraft when replacement aircraft become available effective?
- What is the Air Force C-130J requirement and what other alternatives were considered?
- What is the C-130J logistics support funding shortfall?

Background

The C-130 Hercules aircraft is a medium-range, tactical airlift aircraft designed primarily for transporting personnel and cargo. The aircraft was originally flown in 1954 and has been under continuous production ever since. The Air Force currently has approximately 700 C-130s of various configurations in its current C-130E and H fleet. The average age of the active duty C-130 fleet is over 25 years old, while the average age of the Guard and Reserve C-130s is about 15 years old. These aircraft are under the management and control of the Air Mobility Command (AMC)[1] and are operated by the active Air Force, the Air National Guard, and the Air Force Reserve.

The Air Force has just begun buying a new J model C-130. Lockheed Martin Corporation is developing the J aircraft as a commercial venture and expects it to (1) lower the cost of ownership of the fleet and (2) climb higher and faster, fly at higher cruise speeds, and take off and land in a shorter distance than the existing fleet. The J will have the same structural

[1]The C-130 fleet was under the control of the Air Combat Command (ACC) from October 1993 until April 1997 when it was reassigned to AMC.

characteristics as previous C-130 models; however, it differs in that it includes, among other things, an advanced integrated digital avionics system, a new engine and composite propellers, a heads-up display, and a redesigned flight station to facilitate operation by a three-man versus a five-man crew. The J can also be bought in a stretched version.[2]

The aircraft is currently undergoing developmental tests and the Federal Aviation Administration (FAA) certification process is expected to end in June 1998. See appendix I for an illustration of the C-130J aircraft, along with the contractor's comparison of the capabilities for the C-130E, H, and J. At the time of our review, 23 Air Force C-130Js were on contract, with delivery of the first aircraft initially scheduled for December 1997. The schedule has slipped, however, and delivery of the first aircraft is now scheduled for October 1998. The schedule has been delayed due to technical problems and the pending FAA certification.[3]

The following sections provide the answers to each of your specific questions. Our scope and methodology for obtaining this information are discussed in appendix II.

What Is the Mission of the Current and Planned Fleet?

The current C-130 fleet is comprised of 12 different variants and the missions vary with each variant. While most of the current fleet is comprised of combat delivery aircraft, many of the C-130 variants perform specialized missions.

The combat delivery C-130 fleet, designated as C-130Es and C-130Hs, is used in a wide variety of wartime and peacetime missions. In wartime, the C-130 combat delivery aircraft primarily performs the intratheater portion of the airlift mission, leaving the long-range intertheater transport mission to larger aircraft such as the C-5 and C-17. These C-130s primarily provide rapid transportation of personnel or cargo for delivery by parachute to a designated drop zone, or by landing at austere locations within the conflict area. These aircraft are also the primary aeromedical evacuation aircraft in a conflict.

[2]The stretched version, the C-130J-30, provides additional room in the aircraft so that more pallets or equipment can be carried.

[3]The C-130J aircraft is a military version of a commercial variant of the C-130J, which is called the 382J. The 382J must be FAA certified, and that certification must be completed before the military C-130Js can be delivered to the Air Force.

In peacetime, the combat delivery C-130 is used for training flights, regularly scheduled channel operations,[4] and special assignment missions.[5] It is also used in fire fighting and humanitarian relief missions. For example, it has been used to airlift heavy equipment into remote areas of other countries to build airports and roads, and transport local goods.

In addition to the missions performed by the basic combat delivery C-130 aircraft, 11 other variants perform specialized missions. These missions include (1) weather reconnaissance, performed by the WC-130 aircraft; (2) special communication missions, performed by the EC-130 aircraft; and (3) search and rescue, performed by the HC-130 aircraft.

The 12 different C-130 models that are currently in the fleet and their respective missions are summarized in table 1.

[4]Channel operations are regularly scheduled airlift service supporting multiple user organizations.

[5]Special assignment missions are exclusive airlift service to a single user to meet special requirements, such as a unit mobility exercise.

Table 1: Summary of Air Force C-130 Aircraft Missions for Models Currently in the Fleet

Totals as of January 12, 1998

Model	Total no.	Primary missions
AC-130H/U"Spectre"/ "Spectre" Gunship	21	Close air support, air interdiction, and armed reconnaissance
C-130E "Hercules"[a]	236	Intratheater airlift and airdrop; can operate from rough dirt strips and is used for delivering troops and equipment by parachute into hostile areas
C-130H "Hercules"[a]	286	Intratheater airlift and airdrop; can operate from rough dirt strips and is used for delivering troops and equipment by parachute into hostile areas
EC-130E "ABCCC"	7	Airborne battlefield command and control center
EC-130E "Commando Solo"	6	Psychological warfare—airborne radio and TV broadcast
EC-130E "Senior Hunter"	2	Airlift for the Air Force Intelligence Command, called the Senior Scout mission
EC-130H "Compass Call"	15	Jamming/electronic warfare
HC-130	30	Search and rescue
LC-130H	7	Ski-equipped for Antarctic and Arctic support of scientific activities
MC-130E/H "Combat Talon I/II"	38	Global day, night, adverse weather special operations airdrop
MC-130P "Combat Shadow"	28	Air refueling for special operation forces' helicopters in hostile territory and airdrop of special operations teams
NC-130 (A, E, H)	4	Test aircraft
WC-130H	10	Weather reconnaissance
Total	**690**	

[a]The C-130E and C-130H models are both combat delivery aircraft and are only separated in this table to identify amounts associated with each model design.

Source: Developed by GAO using data from Air Force and C-130 System Program Office.

Appendix III provides further details on these C-130 models.

The Air Force plans to buy the C-130J as a one-for-one replacement of C-130Es and C-130Hs as they reach their service life. Air Force officials told us that the basic missions of the C-130 fleet will not change when the new C-130J aircraft enter the fleet. However, it appears that these missions will be expanded. Specifically, Air Force officials told us that, as part of

the Air Force's planned C-130J procurement, it is planning to buy the new stretched C-130J-30. We were further told that because this aircraft will provide more room/airplane capacity, it could be used to augment intertheater missions, like strategic brigade airdrops.[6] Final decisions regarding the procurement of the C-130J-30 and the aircraft's use, however, will not be made until fall 1998.

What Are the C-130 Requirements for the Air National Guard and Air Force Reserve?

At the time of our review, peacetime and wartime requirements for the Air National Guard and Air Force Reserve combat delivery aircraft inventory totaled 264 aircraft. Requirements for the Guard and Reserves' C-130 combat delivery aircraft are established in the Air Force's C-130 MSP, which was delivered to Congress in 1997.

The source of the requirements for these unit's special mission C-130s varied depending on the model. For example, we found that:

- The requirements for the weather reconnaissance WC-130 were set at 10 aircraft by Congress.
- The requirements for the ski-equipped LC-130, according to officials from the National Science Foundation (NSF) and Air National Guard, are set at 10 aircraft. These aircraft are used to conduct operations in support of military taskings and in support (deliver supplies, people, fuel, and scientific equipment) of the NSF's polar research missions.
- The requirements for the psychological warfare EC-130, the search and rescue HC-130, and adverse weather special operations MC-130 emanated from theater commander in chiefs. According to Air Force officials, the specific required number of these aircraft is classified.

Total combat delivery and special mission C-130 inventory for the Air Force Guard and Reserve[7] was 352 aircraft as of January 1998. Appendix IV shows the inventory and locations for these aircraft. As of March 1998, Air Force officials stated that decisions regarding their plans for the future C-130 inventory had not been made.

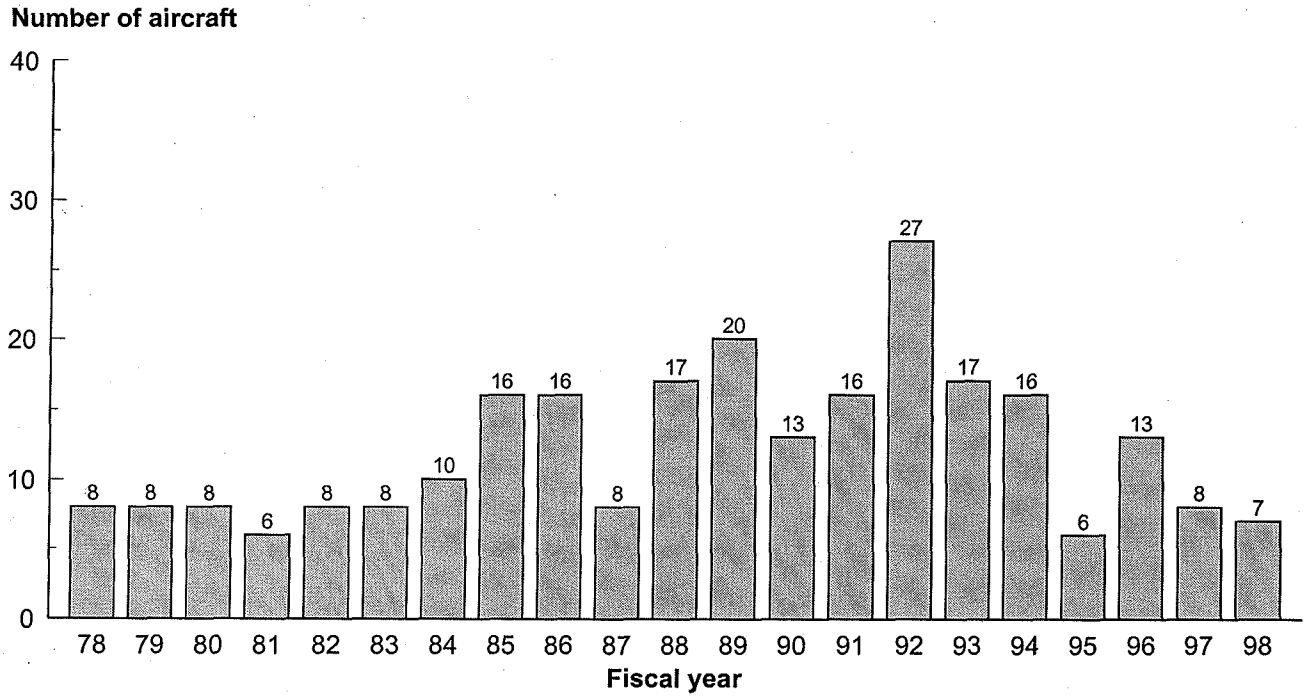
[6]Strategic brigade airdrop is the long-range delivery of an entire Army brigade and its equipment.

[7]Inventory for the remaining portions of this report covers C-130s authorized for performance of the units' mission and does not include the additional aircraft used for training and as backup for aircraft undergoing maintenance.

What Is the C-130 Procurement History in the Guard and Reserve Units?

For the past 21 years, with the exception of five aircraft,[8] Congress has directed the procurement of C-130s for the Air National Guard and Air Force Reserve units. According to C-130 program officials, the Air Force has not requested these aircraft because aircraft in those units have many years of service life remaining. Figure 1 shows the annual procurement of the 256 aircraft that Congress directed for the Guard and Reserve since 1978.

Figure 1: Air Force, Air National Guard, and Air Force Reserve C-130H and C-130J Procurements From 1978 Through 1998



Source: Developed by GAO using Air Force, Air National Guard, and Air Force Reserve data.

[8]These five aircraft were originally requested by the Air Force for active Air Force units but were subsequently scheduled to go to the Reserves at Keesler Air Force Base in Mississippi.

What Are Air Force Plans for Retiring Excess C-130s in the MSP?

Both the Joint Chiefs of Staff's (JCS) June 1996 Intratheater Lift Analysis[9] and the Air Force C-130 MSP[10] reviewed the service's combat delivery aircraft inventory and determined that there were more C-130s in inventory than required for military operations in Korea and Southwest Asia—the two major regional contingencies the Department of Defense (DOD) uses for force structure planning purposes.[11] About 50 C-130 aircraft were identified in the Air Force MSP as excess over requirements. Thirty of these were in the Air National Guard and Air Force Reserve units and the remaining were in the active duty force.

We were told that reductions in the active duty force structure was achieved by reclassifying some of the combat coded aircraft and designating others as ground trainers. Reductions in the Air National Guard were expected to be 24 aircraft (from 190 to 166 aircraft) and the Air Force Reserve Command units were to be reduced by 6 aircraft (from 104 to 98 aircraft). According to Air Force officials, these reductions were not made. In accordance with restrictions in the Conference Reports on the 1998 Department of Defense Appropriations Act and the National Defense Authorization Act for Fiscal Year 1998, these reductions were not taken. Specifically, the reports recommended that the Air National Guard and the Air Force Reserve C-130 aircraft remain at current levels—levels before the MSP. At the time of our review, Air Force officials told us that the Air Force was in the process of designing a plan for retiring excess C-130s.

Is the Air Force Process for Retiring C-130 Aircraft When Replacement Aircraft Become Available Effective?

Although the Air Force has a process governing the retirement of its aircraft, it has not been able to implement the process effectively. As a result, some C-130 aircraft have been retired with substantial service life remaining and/or shortly after the aircraft had been modified. The Air Force, however, appears to be making changes to improve this process.

[9]Congress directed DOD in fiscal year 1991 to assess, among other things, its intratheater lift requirements and develop an integrated plan to meet them. This report, according to Joint Staff officials, addressed this directive.

[10]In September 1994, Congress requested this plan and asked that it include the active duty and reserve components C-130 units and be based on the National Military Strategy and current contingency plans of the JCS.

[11]To determine additional C-130 requirements for worldwide contingencies unrelated to these scenarios, the Joint Staff surveyed the theater commanders. Even with their additional requirement, the C-130 combat delivery fleet still exceeded the number needed for intratheater lift.

Air Force Instruction 16-402[12] governs the process for retiring aircraft. The process begins with a document called the Force Structure Plan Outlook. This document tells the commands how many aircraft are excess to requirements in a given year, usually as a result of budget constraints or a change in requirements for the fleet. Once a decision has been made to excess a certain number of aircraft, the commands are to review:

(1) The aircraft's remaining service life.

(2) The recent maintenance history on the aircraft. Program depot maintenance and other inspection records are reviewed, at this point, to assess whether the aircraft had a lot of corrosion problems, maintenance troubles, and/or a known history of performance problems.

When a decision to excess a specific aircraft is finalized, Air Force headquarters is to determine whether other users—that is, active duty, guard and reserves, and ultimately other agencies—could use the aircraft. If other users were not identified, the aircraft should be retired.

The Air Force has retired C-130s with service life remaining on the aircraft. Program officials told us that such retirements have generally been driven by congressional direction to buy more C-130s than the Air Force requested in its annual budget requests. Program officials told us that, accordingly, it was difficult to control the retirement of C-130 aircraft. They stated that, since retirement from the fleet had been based on congressionally directed acquisitions replacing existing C-130 aircraft, they were not retiring aircraft because the service life had expired. Of the 49 C-130s retired between June 1991 and May 1997, 36 were C-130Bs with old technology and 13 were newer C-130Es. Of the 13 C-130Es, all had an average of 14 years of service life still remaining.

In addition, annual congressional appropriation language states that, with the exception of safety modifications, no modifications may be done if the service plans to retire an aircraft in less than 5 years after modifications. We noted that of the 49 C-130 aircraft the Air Force has retired since 1991, 40 had modifications[13] within 5 years of retirement, totaling about $9 million. Program officials told us that it is difficult to control modifications of C-130 aircraft because the Air Force does not generally know 5 years in advance when a C-130 aircraft will leave the fleet.

[12]Aerospace Vehicle Assignment, Distribution, Accounting, and Termination, dated April 26, 1994.

[13]Safety modifications are not included in this amount.

The Air Force appears to be taking steps to improve its C-130 modifications and retirement process. Specifically, in October 1997, the Vice Chief of Staff, in a message to the lead Air Force commands for C-130 aircraft, stated that additional C-130J congressional adds should be expected for fiscal year 1998 and beyond and that the commands should plan and program accordingly. Air Force officials have stated that they will incorporate this direction in the development of their C-130 retirement plan. In that regard, an AMC Tiger Team looking at the C-130 fleet has recommended to the Air Force Chief of Staff that 150 C-130Es with the worst service life problems be replaced with C-130J-30s. We were told, however, that final decisions were not expected on the retirement of the old C-130s and procurement of the Js until late fall 1998. Until these decisions are made and the plan released, it is too early to determine how well this directive will be implemented.

What Is the Air Force C-130J Requirement and What Other Alternatives Were Reviewed?

As of March 1998, the Air Force had not decided how many C-130Js will be required. According to C-130 program officials, although the Air Force has a documented requirement for the C-130J as the need arises, a large-scale C-130J program is not needed at this time because the service life of the first C-130E will not expire until 2002. Accordingly, the Air Force has only been requesting one or two C-130Js per year since 1996 for the active force.[14] As previously shown in figure 1, the remaining J acquisitions were congressionally directed buys for the Guard and Reserve.

The Air Force began procuring the J in accordance with directions from the Air Force Chief of Staff to use fiscal year 1994 Guard and Reserve procurement funds to buy two C-130Js. Originally, the two J models were going to the active duty Air Force, which provided the Air National Guard two C-130Hs as a swap. These two J models will now be going to the Air Force Reserves at Keesler Air Force Base, Mississippi, following the flight test program.

The justification for the new C-130J buys, according to requirements, acquisition, and budget documents, is to reduce the cost of ownership of the C-130E and H fleet, with anticipated cost savings associated with the new technology and the reduced crew and maintenance needs of the J aircraft. A review of the C-130J program office's life-cycle cost estimate was completed in June 1996 by the Air Force Cost Analysis Improvement Group. The report stated that operations and support savings are forecast

[14]According to current Air Force basing plans, however, all C-130Js on contract are now scheduled to go to Guard and Reserve bases.

from a program of 135 C-130Js bought over the 1996 to 2014 time frame with the new technology and the reduced crew and maintenance needs of the J aircraft.[15] Air Force officials, however, acknowledge that savings associated with this commercial buy will not be substantiated until several years after delivery/transfer of ownership is taken by the Air Force, which, as previously stated, is now expected in October 1998 for the first J aircraft.

Additionally, during our review, some Air Force officials expressed concern that the normal requirements process was not followed in the recent J buys. They stated that requirement documents for the EC-130Js and WC-130Js were written after the Air Force had made a commitment to buy the aircraft. For example, Congress appropriated funds for two unrequested EC-130Js—one in fiscal year 1997 and one in fiscal year 1998. An October 7, 1997, memorandum from the Office of the Secretary of the Air Force for Acquisition noted, however, that a validated operational requirements document had not yet been generated. Additionally, these officials noted that there have been concerns that the EC-130J buy may not address all of the problems in the current EC-130 fleet—primarily, the lack of adequate space on the aircraft. There are 12 crew stations aboard the EC-130 aircraft and we were told that there is barely enough room for the broadcasting equipment needed for each station. The Air Force has looked at the wide body Boeing 757 as a replacement for the current EC-130 fleet, but has since decided to use the J.

Regarding alternatives to the J, we were told that alternatives have been evaluated and rejected in the past. Specifically, in December 1996, an unsolicited proposal was submitted to modernize the C-130 fleet. Appendix V summarizes the Air Force's reasons for rejecting this proposal. In addition to rejecting prior alternatives to the J for cost and technical reasons, Air Force officials told us that the alternatives were premature since the first C-130E is not scheduled to retire until 2002. Air Force officials also told us that the Air Force is currently considering alternatives presented by an AMC tiger team. Among other things, the goals of the AMC effort included developing an integrated plan to improve reliability and maintainability of the fleet, produce greater commonality in the fleet, and provide an overall acquisition strategy for the C-130 weapon system.

After review of specific problems in the C-130 fleet, which included the inability of the fleet to meet Global Air Traffic Management requirements

[15]This amount includes the 1994 H/J swap C-130Js also. The cost estimate includes the cost to maintain the 135 Js from fiscal year 1997 through fiscal year 2041.

and structural/corrosion problems of the aging fleet, the tiger team recommended that the Air Force (1) modify 360 of the "best structural" C-130s with a block modification process that would essentially put a new front end, including a new engine and cockpit, on the older C-130 aircraft[16] and (2) replace aircraft with the worst service life/structural/corrosion problems—about 150 in this category—with new C-130J-30s. Final decisions on both matters, however, are not expected until the fall of 1998.

What Is the C-130J Logistics Support Funding Shortfall?

Air Force C-130 officials stated that funding shortfalls for the C-130 fleet have historically been a problem, primarily because Congress has added C-130 aircraft to their budget without providing the needed funding for logistics support. This support includes spare parts, training, and maintenance that is normally provided with a weapon system. These officials further stated that the Air Force was able to deal with the shortfalls in the past because a large logistics support infrastructure was in place for the C-130E and C-130H models, which helped them to absorb the shortfalls. However, they noted that because the C-130J is so different from those prior models, the majority of the support in the current infrastructure cannot be used for the J aircraft.

Additionally, these officials noted that the Air Force, with its constrained budgets and various weapon system priorities, has not budgeted for these funding shortfalls. According to these officials, without the needed support funding, it is possible that some C-130J aircraft may have to be cannibalized to support others in the fleet or the unsupported C-130Js may have to be parked on the ramp at some locations.

The latest Air Force funding shortfall document reported a cumulative logistics support shortfall through fiscal year 2003 of $302.11 million for the 23 C-130J aircraft on contract through 1998, the 1 requested in 1999, and the 2 that are expected to be bought in 2002 and 2003. Table 2 presents the annual and cumulative logistic support funding shortfalls associated with the C-130J program as of January 7, 1998.[17]

[16]According to Air Force officials, this modified block process, which will result in a configuration referred to as a C-130X, entails a number of extensive modifications done at one time. This will bring the fleet up to date technologically and provide commonality within the fleet.

[17]The amounts associated with the funding shortfall varied a number of times, during our review, because items to be purchased and/or the funding assumed to be available changed. Air Force officials said estimates for the funding shortfall will continue to vary as long as uncertainties, such as annual congressionally directed acquisitions and related decisions on basing, exist.

Table 2: Air Force C-130J Shortfall

Dollars in millions

Budget year	1994	1996	1997	1998	1999	2000	2001	2002	2003
Aircraft quantity	2	5	9	7	1	0	0	2	2
Annual shortfall	0	0	$-11	$-69	$-5	$-70	$-65	$-55	$-27
Cumulative shortfall	0	0	$-11	$-80	$-85	$-155	$-220	$-275	$-302

Source: C-130J Program Office (as of Jan. 7, 1998).

C-130J program officials told us that the lack of commonality of the J with the existing fleet is causing the Air Force to fund the following.

- Interim Contractor Support (ICS). This includes not only the typical ICS costs such as on-site contractor personnel, technical data, and repair of reparables, but also a commercial supply support system. This support system is needed because, unlike the previous C-130 models, the Air Force does not yet have a database to determine the mean time between failure rates of the C-130J spares. As a result, the correct amount of spares to maintain the fleet's mission capable rate is not known. Hence, provisioning for the C-130J will be contracted out with this contractor support supply system.
- C-130J training systems (simulators) and the associated costs of training flight and maintenance crews. Current plans are to buy five flight simulators for pilot training, a maintenance trainer, and a loadmaster trainer.
- C-130J peculiar support equipment. This is the support equipment peculiar to the J and includes new or modified support equipment like testers, and special tools needed to test, remove, replace, or handle the C-130J unique items on the aircraft.

Air Force officials stated that the J's funding problems are further exacerbated because the aircraft are being assigned to several different bases rather than a single base. Specifically, the 23 Air Force C-130Js on contract are assigned as follows: 9 WC-130Js and 4 combat delivery Js will be located at Keesler Air Force Base, Mississippi; 2 EC-130Js will be located at the Air National Guard unit in Harrisburg, Pennsylvania; and 8 combat delivery C-130Js will be located at the Air National Guard unit in Baltimore, Maryland. These different base assignments result in redundant logistical support such as maintenance and training costs at each base.

Additionally, there has been much discussion between the Air Force and the Director of Operational Test and Evaluation (DOT&E) regarding the scope of Live Fire Test (LFT) for the C-130J program. An agreement was reached in March 1998, between the two and will be reflected in the C-130J Test and Evaluation Master Plan and appropriate live fire test plans. While there is currently a funding shortfall associated with the LFT program, the Air Force has agreed to fund about $5.5 million for the following tests: (1) the wing dry bay, (2) the composite propeller, (3) engine fire suppression (combat and non-combat), (4) the vulnerability analysis, and (5) the engine blade containment. DOT&E will fund the hydrodynamic ram testing and the mission abort assessment, which will be about $2.2 million.

Air Force and contractor officials have been working to remedy the C-130J shortfall with such efforts as commercial supply support system, also called shared logistics. Shared logistics places high-cost, low-use support equipment at a centralized location, rather than at each base, while high usage and special mission spares are placed at each of the bases where the C-130J will be located. Air Force officials said that, according to data provided by Lockheed Martin, costs for spares would total about $20 million per base for a new aircraft like the C-130J if each C-130J base was provided a full complement of spare parts. Under the shared logistics concept, only $4 million would be required for each C-130J base compared with the previously stated $20 million. Savings from this concept have already been incorporated into the Air Force's budget plan. Although no location has been selected for the centralized site, several have been suggested, including options for putting the centralized location where most of the planes will be based or at a location with access to overnight delivery services to facilitate just-in-time deliveries.

In addition to the shared logistics savings, Congress has provided about $24 million in the fiscal year 1998 budget to help fund C-130J support shortfalls.

Agency Comments

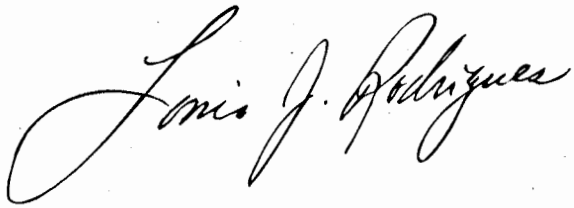
DOD concurred with our report. DOD provided technical suggestions for clarification and we have incorporated these suggestions in the text of the report, where appropriate. The DOD comments are reprinted in appendix VI.

Executive Correspondence
DCN 5781

We are sending copies of this report to appropriate congressional committees and the Secretaries of Defense and the Air Force. We will also provide copies to other interested parties upon request.

Please contact me at (202) 512-4841, if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix VII.

Sincerely yours,



Louis J. Rodrigues
Director, Defense Acquisitions Issues

Contents

Letter 1

Appendix I C-130J Hercules Cargo Aircraft 18

Appendix II Scope and Methodology 21

Appendix III Detailed Mission Descriptions for C-130 Models 23

Appendix IV Air National Guard and Air Force Reserve C-130 Inventory 31

Appendix V Summary of Air Force Reasons for Rejecting the Unsolicited C-130 Modernization Proposal 33

Appendix VI Comments From the Department of Defense 34

Appendix VII Major Contributors to This Report 35

Tables

Table 1: Summary of Air Force C-130 Aircraft Missions for Models Currently in the Fleet 4
Table 2: Air Force C-130J Shortfall 12
Table I.1: Contractor Comparison of C-130E/H/J/J-30 Performance Capabilities and Capacity Characteristics 19
Table IV.1: Air National Guard C-130 Aircraft 31
Table IV.2: Air Force Reserve C-130 Aircraft 32

Figures

Figure 1: Air Force, Air National Guard, and Air Force Reserve C-130H and C-130J Procurements From 1978 Through 1998 6
Figure I.1: C-130J-30 20

Abbreviations

ABCCC	Airborne Battlefield Command and Control Center
ACC	Air Combat Command
AMC	Air Mobility Command
DOD	Department of Defense
DOT&E	Director of Operational Test and Evaluation
FAA	Federal Aviation Administration
ICS	Interim Contractor Support
JCS	Joint Chiefs of Staff
LFT	Live Fire Test
MSP	Master Stationing Plan
NSF	National Science Foundation

C-130J Hercules Cargo Aircraft

The C-130J Hercules is the next generation medium-range tactical cargo and personnel aircraft that will be introduced into the existing C-130 fleet of Es and Hs. It is intended to replace aging C-130E/Hs as they approach the end of their service life. Even though the C-130 fleet has been known as the "workhorse" for the active duty Air Force, the Air National Guard, and the Air Force Reserve, the Navy and other governments use the airplanes as well.

Development of the C-130J consists of the state-of-the-art technology, according to Lockheed Martin—the contractor for the "J"—and will reduce manpower requirements, operating costs, and life-cycle costs. Although the C-130J essentially has the same structural characteristics as previous models, there are some significant differences. These include the advanced two-pilot flight station with fully integrated digital avionics system with color multi-functional liquid crystal displays and head-up displays; navigation systems with dual embedded Global Positioning Systems, mission planning system, low-power color radar, digital map display, and new digital autopilot; simplified fuel system with provisions for adding a receiver aerial refueling probe or tanker aerial refueling pods; an extensive built-in test integrated diagnostics with an advisory, caution, and warning system; and higher power turboprop engines with more efficient, six-bladed all composite propellers.

According to Lockheed Martin, the above enhancements will enable the airplane to climb higher and faster, fly farther at a higher cruise speed, and take off and land in a shorter distance than the existing C-130 fleet. Table I.1 presents the contractor's comparison of the J and J-30 capabilities with those of previous models and figure I.1 shows a C-130J-30 model.

Table I.1: Contractor Comparison of C-130E/H/J/J-30 Performance Capabilities and Capacity Characteristics

Some capabilities and/or capacities	C-130E	C-130H	C-130J	C-130J-30
Maximum payload (pounds)	39,000	39,000	41,700	39,300
Maximum payload range (nautical miles)	1,860	1,745	2,450	2,450
Maximum effort take off roll (feet)	3,300	3,000	1,950	1,950
Cruise speed (knots)	280	300	340	340
Paratroops capacity	64	64	64	92
Troop seats	92	92	92	128
Cargo floor length (feet)	40	40	40	55
Litters	74	74	74	97
Airdrop 463L pallets	5	5	5	7
Container delivery system bundles	16	16	16	24
Runway length/width/taxiway (feet)	3,000/60/45	3,000/60/45	3,000/60/45	3,000/60/45
All weather aerial delivery	Partial	Partial	Yes	Yes

Source: Lockheed Martin Corporation.

Figure I.1 is a picture of the C-130J-30 aircraft.

Figure I.1: C-130J-30

Source: Lockheed Martin Corporation.

Scope and Methodology

To accomplish our objectives, we interviewed a number of officials within the Office of the Secretary of Defense; the Joint Chiefs of Staff; the Office of the Secretary of the Air Force; the Air Mobility Command, Scott Air Force Base, Illinois; the Air Combat Command, Langley Air Force Base, Virginia; the Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio; the Air Education and Training Center, Little Rock Air Force Base, Arkansas; Air National Guard Headquarters, Washington, D.C.; Air National Guard Readiness Center, Andrews Air Force Base, Maryland; Air National Guard, Harrisburg, Pennsylvania; the Air Force Reserve Command, Robins Air Force Base, Georgia; the Warner-Robins Air Logistics Center, Robins Air Force Base, Georgia; Air Force Reserve Components in Baltimore and Minneapolis; Lockheed Martin, Arlington, Virginia; Air Force Audit Agency; the National Science Foundation, Virginia; and the Defense Contract Management Command, Marietta, Georgia.

To ascertain the mission of the current and planned C-130 fleet, we reviewed the Air Combat Command's C-130 Total Force Plan Briefing, C-130 Combat Delivery Mission Area Plan, and Combat Air Forces Concept of Operations for Theater Airlift; the Air Mobility Command's 1998 Air Mobility Master Plan; Operational Requirements Documents for the various C-130 model designs; the Joint Chiefs of Staffs Intratheater Lift Analysis; the Air Force C-130 Master Stationing Plan; prior and current C-130 Selected Acquisition Reports; and Air Force headquarters' written responses in this area.

To obtain the Air National Guard and Air Force Reserve C-130 requirement—including current and planned inventory and the C-130 procurement history for these units, we obtained such information from the headquarters Air National Guard, Washington, D.C.; the Air Force Reserve Command, Robins Air Force Base, Georgia; and the Air Logistics Center, Warner-Robins Air Force Base, Macon, Georgia.

To ascertain the Air Force plans for retiring C-130s identified as excess aircraft in the C-130 Master Stationing Plan, we reviewed the Final C-130 Master Stationing Plan, and Public Law 103-335, section 8125, which requires the plan. In addition, we obtained written responses from Air Force headquarters, Air National Guard, Air Force Reserves headquarters, and the Air Mobility Command on this matter.

To determine the effectiveness of the Air Force's system for retiring old aircraft when new C-130s enter the fleet, we reviewed listings of

modifications in the C-130 System Program Offices' Time Compliance Technical Orders that were done to C-130B and E models retired since 1978, and applicable laws and regulations regarding modifying and retiring aircraft. We also obtained views from C-130 program officials on how retirement of the fleet was done in the past and how they expect it will be done in the future.

To determine the Air Force requirement/justification for the C-130J aircraft and whether or not alternatives to buying the new J model were considered, we reviewed the C-130J Operational Requirement Document; the Single Acquisition Management Plan and other applicable program documentation; Senate Report 104-267, which required the Secretary of Defense to report by March 1997 on the benefits of remanufacturing the C-130 fleet and the Under Secretary of Defense for Acquisition and Technology's April 29, 1997, letter to congressional defense committees on this subject; Wright-Patterson Air Force Base's assessment of an unsolicited proposal to remanufacture the C-130 fleet; and data provided by Air Force headquarters regarding the requirement for the program. We also toured the C-130J-30 on display at Ronald Reagan National Airport.

To ascertain the Air Force logistic support funding needs for the C-130J aircraft, we reviewed the October 1995 and November 1996 C-130J contracts and applicable documentation for subsequent options that were exercised, and the quarterly C-130J Defense Acquisition Executive Summary Report for the C-130J program. We also obtained views, perspectives, and supporting documentation from officials at Air Force headquarters, Air Combat Command, Air Mobility Command, and the C-130J System Program Office at Wright-Patterson Air Force Base regarding the reasons for the funding shortfalls and initiatives/efforts to reduce the shortfalls.

We conducted this review from January 1997 to March 1998 in accordance with generally accepted government auditing standards.

Detailed Mission Descriptions for C-130 Models

C-130 model: C-130E and H Hercules (Combat delivery models)

Commands: Air Mobility Command, Air Combat Command, Air Force Reserve, Air Education and Training, Air National Guard, and Air Force Special Operations Command

Mission:
The C-130 Hercules combat delivery models perform the intratheater portion of the airlift mission. Their primary mission is to provide rapid transportation of personnel or cargo for delivery by parachute to hostile areas, or by landing at rough, dirt strips within those areas. The C-130 E/H models can also be used as tactical transports and can be readily converted for aeromedical evacuation or aerial delivery missions. The C-130 is the primary tactical aeromedical evacuation aircraft. During peacetime, it joins on mercy flights throughout the world, bringing food, clothing, shelter, doctors, nurses, and medical supplies as well as moving victims to safety.

Special equipment/features:
The C-130H is generally similar to the E model but has updated turboprops, a redesigned outer wing, updated avionics, and other minor improvements. In its airlift configuration, the C-130E/H can carry up to 92 combat troops with equipment, 64 paratroopers, 74 litter patients, or 6 standard 463-L pallets. It can transport various configurations of rolling stock, including some oversize vehicles.

C-130 model: AC-130H Spectre

Command: Air Force Special Operations Command

Mission:
The AC-130H is a gunship with primary missions of close air support, air interdiction, and armed reconnaissance. Additional missions include perimeter and point defense, escort, landing, drop and extraction zone support, forward air control, limited command and control, and combat search and rescue.

Special equipment/features:
These heavily armed aircraft incorporate side-firing weapons integrated with sophisticated sensor, navigation, and fire control systems to provide firepower or area saturation during extended periods, at night, and in

adverse weather. The sensor suite consists of a low light level television sensor and an infrared sensor. Radar and electronic sensors also give the gunship a method of positively identifying friendly ground forces as well as effective ordnance delivery during adverse weather conditions. Navigational devices include an inertial navigation system and global positioning system.

C-130 model: AC-130U Spectre Gunship

Command: Air Force Special Operations Command

Mission:
The AC-130U's primary missions are nighttime close air support for special operations and conventional ground forces; air interdiction; armed reconnaissance; air base, perimeter, and point defense; land, water, and heliborne troop escort; drop, landing, and extraction zone support; forward air control; limited airborne command and control; and combat search and rescue support.

Special equipment/features:
The AC-130U has one 25-millimeter Gatling gun, one 40-millimeter cannon, and one 105-millimeter cannon for armament and is the newest addition to the Air Force Special Operations Command's fleet. This heavily armed aircraft incorporates side-firing weapons integrated with sophisticated sensor, navigation, and fire control systems to provide firepower or area saturation at night and in adverse weather. The sensor suite consists of an all light level television system and an infrared detection set. A multi-mode strike radar provides extreme long-range target detection and identification. The fire control system offers a dual target attack capability, whereby two targets up to 1 kilometer apart can be simultaneously engaged by two different sensors, using two different guns. Navigational devices include the inertial navigation system and global positioning system. The aircraft is pressurized, enabling it to fly at higher altitudes and allowing for greater range than the AC-130H. Defensive systems include a countermeasures dispensing system that releases chaff and flares to counter radar infrared guided anti-aircraft missiles. Also infrared heat shields mounted underneath the engines disperse and hide engine heat sources from infrared guided anti-aircraft missiles.

C-130 model: EC-130E "Command Solo"

Command: Air National Guard

Mission:
EC-130E Commando Solo, the Air Force's only airborne radio and television broadcast mission, is assigned to the 193rd Special Operations Wing, the only Air National Guard unit assigned to the Air Force Special Operations Command. Commando Solo conducts psychological operations and civil affairs broadcasts. The EC-130E flies during either day or night scenarios and is air refuelable. Commando Solo provides an airborne broadcast platform for virtually any contingency, including state or national disasters or other emergencies. Secondary missions include command and control communications countermeasures and limited intelligence gathering.

Special equipment/features:
Highly specialized modifications include enhanced navigation systems, self-protection equipment, and the capability to broadcast color television on a multitude of worldwide standards.

C-130 model: EC-130E Airborne Battlefield Command and Control Center (ABCCC)

Command: Air Combat Command

Mission:
The EC-130E is a modified C-130 "Hercules" aircraft designed to carry the ABCCC capsules. While functioning as an extension of ground-based command and control authorities, the primary mission is providing flexibility in the overall control of tactical air resources. In addition to maintaining control of air operations, ABCCC can provide communications to higher headquarters, including national command authorities, in both peace and wartime environments.

Special equipment/features
These one of a kind aircraft include the addition of external antennae to accommodate the vast number of radios in the capsule, heat exchanger pods for additional air conditioning, an aerial refueling system, and special mounted rails for uploading and downloading the capsule. The ABCCC system is a high-tech automated airborne command and control facility featuring computer generated color displays, digitally controlled

communications, and rapid data retrieval. The platform's 23 fully securable radios, secure teletype, and 15 automatic fully computerized consoles, allow the battlestaff to analyze current combat situations and direct offensive air support.

C-130 model: EC-130H "Compass Call"

Commands: Air Combat Command and Air Force Materiel Command

Mission:
Compass Call is the designation for a modified version of the C-130 "Hercules" aircraft configured to perform tactical command, control, and communications countermeasures. Specifically, the aircraft uses noise jamming to prevent communication or the transfer of information essential to command and control of weapon systems and other resources. It primarily supports tactical air operations but also can provide jamming support to ground force operations.

Special equipment/features
Modifications to the aircraft include an electronic countermeasures system (Rivet Fire), air refueling capability, and associated navigation and communications systems. Rivet Fire demonstrated its effect on enemy command and control networks in Panama and Iraq.

C-130 model: HC-130

Commands: Air Combat Command, Air Force Reserve, and Air National Guard

Mission:
The HC-130H/N's mission is search and rescue. The HC-130P does aerial refueling of combat search and rescue helicopters and deployment of para-rescuemen. The HC-130P deploys worldwide to provide combat search and rescue coverage for U.S. and allied forces. Combat search and rescue missions include flying low-level, preferably at night aided with night vision goggles, to an area where aerial refueling of a rescue helicopter is performed or para-rescuemen are deployed. The secondary mission of the HC-130P is peacetime search and rescue. HC-130P aircraft and crews are trained and equipped for search and rescue in all types of terrain, including arctic, mountain, and maritime. Peacetime search and

rescue missions may include searching for downed or missing aircraft, sinking or missing water vessels, or missing persons. The HC-130P can deploy para-rescuemen to a survivor, escort helicopters to a survivor, or airdrop survival equipment.

Special equipment/features:
H/N aircraft are equipped with an advanced avionics package. Improvements are being made to the HC-130P to provide improved navigation, enhanced communications, better threat detection, and more effective countermeasures systems. When fully modified, the HC-130P will have a self-contained navigation system, including an inertial system and global positioning system. It will also have a missile warning system, radar warning receiver, and associated chaff and flare dispenser systems.

C-130 model: LC-130H

Command: Air National Guard

Mission:
The primary mission of this model is Arctic support. Two specific missions are support of (1) the National Science Foundation in Antarctica and (2) assorted national and international scientific activities in Greenland. (The Navy also operates seven LC-130 aircraft in Antarctica. These aircraft move large amounts of cargo, personnel, and fuel throughout the continent.)

Special equipment/features:
LC-130s are specially equipped with landing gear wheel/ski modification for operation in Arctic regions.

C-130 model: MC-130E Combat Talon I and MC-130H Combat Talon II

Commands: Air Force Special Operations Command, Air Force Reserve, and Air Education and Training Command

Mission:
The mission of the Combat Talon I/II is to provide global, day, night, and adverse weather capability to airdrop and airland personnel and equipment in support of U.S. and allied special operations forces. The MC-130E also has a deep penetrating helicopter refueling role during special operations missions.

Special equipment/features:
These aircraft are equipped with in-flight refueling equipment, terrain-following, terrain-avoidance radar, an inertial and global positioning satellite navigation system, and a high-speed aerial delivery system. The special navigation and aerial delivery systems are used to locate small drop zones and deliver people or equipment with greater accuracy and at higher speeds than possible with a standard C-130. The aircraft is able to penetrate hostile airspace at low altitudes and crews are specially trained in night and adverse weather operations. Nine of the MC-130Es are equipped with surface-to-air Fulton air recovery system, a safe, rapid method of recovering personnel or equipment from either land or water. It involves use of a large, helium-filled balloon used to raise a 450-foot nylon lift line. The MC-130E flies toward the lift line and snags it with scissors-like arms located on the aircraft nose. The person or equipment is lifted off, experiencing less shock than that caused by a parachute opening. Aircrew members then use a hydraulic winch to pull the person or equipment aboard through the open rear cargo door. The MC-130H features highly automated controls and displays to reduce crew size and workload.

C-130 model: MC-130P Combat Shadow

Commands: Air Force Special Operations Command, Air Education and Training Command, and Air Force Reserve

Mission:
The MC-130P Combat Shadow flies clandestine or low visibility, low-level missions into politically sensitive or hostile territory to provide air refueling for special operations helicopters. The MC-130P primarily flies its single- or multi-ship missions at night to reduce detection and intercept by airborne threats. Secondary mission capabilities include airdrop of small special operations teams, small bundles, and rubber raiding craft; night-vision goggle takeoffs and landings; tactical airborne radar approaches; and in-flight refueling as a receiver.

Special equipment/features:
When modifications are complete in fiscal year 1999, all MC-130P aircraft will feature improved navigation, communications, threat detection, and countermeasures systems. When fully modified, the Combat Shadow will have a fully integrated inertial navigation and global positioning system, and night-vision goggle-compatible interior and exterior lighting. It will

also have a forward-looking infrared radar, missile and radar warning receivers, chaff and flare dispensers, and night-vision goggle-compatible heads-up display. In addition, it will have satellite and data burst communications, as well as in-flight refueling capability as a receiver. The Combat Shadow can fly in the day against a reduced threat; however, crews normally fly night, low-level, air refueling and formation operations using night-vision goggles.

C-130 model: NC-130A, E, H

Command: Air Force Materiel Command

Mission:
Test aircraft.

C-130 model: WC-130H

Command: Air Force Reserve

Mission:
The WC-130 Hercules is a high-wing, medium-range aircraft used for weather reconnaissance missions. It is a modified version of the C-130 configured with computerized weather instrumentation for penetration of severe storms to obtain data on storm movements, dimensions, and intensity. The WC-130 is flown exclusively from Keesler Air Force Base by Air Force Reserve organizations known as the Hurricane Hunters. The hurricane reconnaissance area includes the Atlantic Ocean, Caribbean Sea, Gulf of Mexico, and central Pacific Ocean areas. The WC-130 is capable of staying aloft nearly 18 hours during missions. It is equipped with two external 1,400 gallon fuel tanks, an internal 1,800 gallon fuel tank, and uprated engines. An average weather reconnaissance mission might last 11 hours and cover almost 3,500 miles while the crew collects and reports weather data.

Special equipment/features:
Weather equipment aboard the aircraft provides a high-density, high accuracy horizontal atmospheric sensing capability. Sensors installed on the aircraft measure outside temperature, humidity, absolute altitude of the aircraft, pressure altitude, wind speed, and direction once per second. This information, along with an evaluation of other meteorological

conditions, turbulence, icing, radar returns and visibility, is encoded by the on-board meteorologist and transmitted by satellite to the National Hurricane Center. Special equipment measures the atmosphere vertically by using an expendable instrument, which is dropped from the aircraft. The 16-inch long cylinder is dropped every 400 miles while on a weather track and in the center or eye of a hurricane. A vertical atmospheric profile of pressure, temperature, humidity, barometric pressure, wind speed, and direction is received from the instrument as it descends to the ocean surface, slowed and stabilized by a small parachute. From this information, the system operator analyzes and encodes data for satellite transmission to the National Hurricane Center.

Air National Guard and Air Force Reserve C-130 Inventory

Table IV.1: Air National Guard C-130 Aircraft (inventory as of January 12, 1998)

Model	Location	Inventory
C-130E	Baltimore, Md.	8
C-130E	Quonset, R.I.	8
C-130E	Channel Island ANG Sta, Calif.	12
C-130E	Reno, Nev.	8
C-130E	Boise, Idaho	4
C-130E	Peoria, Ill.	8
C-130E	Little Rock, Ark.	8
C-130E	Selfridge, Mich.	8
Total C-130E		**64**
C-130H	Schenectady, N.Y.	4
C-130H	Nashville, Tenn.	12
C-130H	Charleston, W.Va.	8
C-130H	Louisville, Ky.	12
C-130H	Minneapolis/St. Paul, Minn.	8
C-130H	Dallas, Tex.	8
C-130H	Oklahoma City, Okla.	8
C-130H	St. Joseph, Mo.	8
C-130H	Charlotte, N.C.	12
C-130H	Cheyenne, Wyo.	8
C-130H	Savannah, Ga.	8
C-130H	Wilmington, Del.	8
C-130H	Martinsburg, W.Va.	12
C-130H	Kulis, Alaska	8
C-130H	Mansfield Lahm Airport, Ohio	8
C-130H	Hickam, Hawaii	4
C-130H	McEntire, S.C.	1
C-130H	New Orleans, La.	1
Total C-130H		**138**
Total ANG C-130 Es and Hs		**202**
EC-130E	Harrisburg, Pa.	5
HC-130H	Kulis, Alaska	2
HC-130N/P	Suffolk, N.Y.	4
HC-130P	Moffet NAS, Calif.	4
LC-130H	Schenectady, N.Y.	7
Total ANG Special Mission C-130s		**22**
Grand total ANG C-130 Aircraft		**224**

Source: Developed by GAO using Air National Guard data.

Table IV.2: Air Force Reserve C-130 Aircraft (as of January 12, 1998)

Model	Location	Inventory
C-130E	Portland IAP, Oreg.	0
C-130E	Patrick AFB, Fla.	0
C-130E	Eglin AFB, Fla.	0
C-130E	Minneapolis/St. Paul, Minn.	8
C-130E	Keesler AFB, Miss.	8
C-130E	Willow Grove, Pa.	10
Total C-130E		**26**
C-130H	Gen. Mitchell IAP, Wis.	10
C-130H	Youngstown, Ohio	16
C-130H	Pittsburgh, Pa.	8
C-130H	Dobbins, Ga.	8
C-130H	Niagara Falls, N.Y.	8
C-130H	Peterson AFB, Colo.	14
C-130H	Maxwell AFB, Ala.	8
Total C-130H		**72**
Total AFR C-130Es and Hs		**98**
HC-130N/P	Patrick AFB, Fla.	5
HC-130P	Portland IAP, Oreg.	3
MC-130E	Eglin AFB, Fla.	8
MC-130P	Eglin AFB, Fla.	4
WC-130H	Keesler AFB, Miss.	10
Total AFR Special Mission C-130s		**30**
Grand total AFR C-130 Aircraft		**128**

Source: Developed by GAO using Air Force Reserve data.

Summary of Air Force Reasons for Rejecting the Unsolicited C-130 Modernization Proposal

On December 16, 1996, an unsolicited proposal was submitted to the Air Force to modernize the C-130 fleet. The proposal anticipated a 21-month schedule to fabricate prototypes at a firm fixed-price of $50 million, with projected potential fleet-wide savings of $6 billion.

The C-130 Program Office review of the unsolicited proposal concluded that, although the proposal was technically feasible, it was impractical due to cost, schedule, and technical risks. The actual evaluation is labeled FOR OFFICIAL USE ONLY, precluding a detailed explanation of those risks in this report. However, generic examples of the risks included:

- aggressive concurrency in program schedule;
- reliance on reverse engineering in lieu of original manufacturer equipment data because of proprietary rights of original manufacturer;
- use of unproven technology;
- inadequate support equipment, manuals, training, and spares for the prototype, and for the test and evaluation effort;
- inadequate software development and integration for an undefined avionics suite, including lack of crew-member workload analysis;
- an additional $15 million for the test and evaluation effort would be required over the firm fixed-price proposal of $50 million; and
- insufficient substantiation of the $6-billion claimed savings.

In recommending nonapproval of the unsolicited proposal, the C-130 Program Office also cited the lack of program requirement, funding, and direction for the proposed C-130 program as additional reasons for rejection. Finally, the Program Office concluded that the proposal was not unique and innovative as prescribed in the Federal Acquisition Regulation for unsolicited proposals. Hence, even if the proposal was acceptable, it would not qualify for an exception to full and open competition.

Comments From the Department of Defense

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON DC 20301-3000

ACQUISITION AND TECHNOLOGY

10 APR 1998

Mr. Louis J. Rodrigues
Director, Defense Acquisitions Issues
National Security and International
Affairs Division
U. S. General Accounting Office
Washington, DC 20548

Dear Mr. Rodrigues:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report "INTRATHEATER AIRLIFT: Information on the Air Force's C-130 Aircraft," dated March 24, 1998 (GAO Code 707196), OSD Case 1573. The DoD has reviewed the draft report and concurs without further comment.

Suggested technical changes for clarification have been provided separately.

The Department appreciates the opportunity to comment on the GAO draft report.

Sincerely,

George R. Schneiter
Director
Strategic and Tactical Systems

Major Contributors to This Report

National Security and International Affairs Division, Washington, D. C.	Steven Kuhta Thomas Denomme Marion A. Gatling Delores Cohen Michele Mackin
Office of the General Counsel	William T. Woods John Carter
Kansas City Field Office	Greg Symons
Chicago Field Office	Daniel Hauser

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are $2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office
P.O. Box 37050
Washington, DC 20013

or visit:

Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (202) 512-6061, or TDD (202) 512-2537.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

http://www.gao.gov

PRINTED ON RECYCLED PAPER

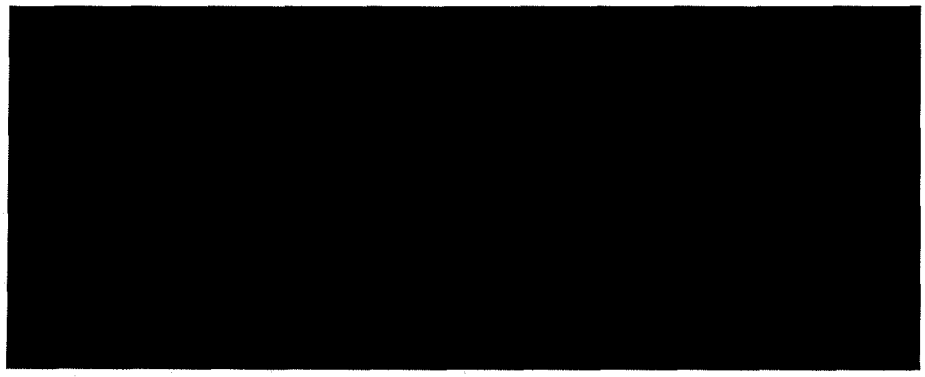
Executive Correspondence
DCN 5781

United States
General Accounting Office
Washington, D.C. 20548-0001

Bulk Rate
Postage & Fees Paid
GAO
Permit No. G100

Official Business
Penalty for Private Use $300

Address Correction Requested



MOFFITT, Stephen SRM (1428)

From: VanDorn, Will [Will.VanDorn@mail.house.gov]
Sent: Friday, June 10, 2005 3:01 PM
To: MOFFITT, Stephen SRM (1428)
Subject: FW: i don't know why, but i didn't think to add up the number of C-130s earmarked for the Guard/reserves

fyi

From: Christopher Bolkcom [mailto:CBOLKCOM@crs.loc.gov]
Sent: Friday, June 10, 2005 2:59 PM
To: VanDorn, Will
Subject: i don't know why, but i didn't think to add up the number of C-130s earmarked for the Guard/reserves

i don't know why, but i didn't think to add up the number of C-130s earmarked for the Guard/reserves. the number is 50.

CHRISTOPHER BOLKCOM. Specialist in National Defense. Congressional Research Service. Library of Congress LM-315, Washington, DC 20540-7460. (202) 707-2577