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Report to the Chairman, Subcommittee on Military Readiness, Committee on Armed Services, House of Representatives

December 2002

MILITARY READINESS

Civil Reserve Air Fleet Can Respond as Planned, but Incentives May Need Revamping





Highlights of GAO-03-278, a report to the Chairman, Subcommittee on Military Readiness, Committee on Armed Services, House of Representatives

Why GAO Did This Study

In the event of a national emergency, the Department of Defense (DOD) can use commercial aircraft drawn from the Civil Reserve Air Fleet to augment its own airlift capabilities. The Civil Reserve Air Fleet is a fleet of aircraft owned by U.S. commercial air carriers but committed voluntarily to DOD for use during emergencies.

After the terrorist attacks of September 11, 2001, many air carriers experienced financial difficulties. This sparked concern about the fleet's ability to respond, if activated, and prompted the Subcommittee to ask GAO to determine whether the fleet could respond to an activation with the required number of aircraft and crews and in the required time frame. The Subcommittee also wanted to know whether the incentives used to attract and retain participants are effective.

What GAO Recommends

GAO is recommending that the next evaluation of mobility requirements include a more thorough study of Civil Reserve Air Fleet capabilities and that the Air Mobility Command study whether smaller wide-body aircraft could be used as efficiently and effectively as the larger B-747-type aircraft to handle DOD's peacetime cargo business. DOD concurred with these recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-03-278.

To view the full report, including the scope and methodology, click on the link above. For more information, contact Neal Curtin at (757) 552-8100 or curtinn@gao.gov.

MILITARY READINESS

Civil Reserve Air Fleet Can Respond as Planned, but Incentives May Need Revamping

What GAO Found

Civil Reserve Air Fleet participants can respond to an emergency or a war with the required number of aircraft and crews and within the required time frame. Currently, there are more aircraft committed to the fleet than are needed to fill the wartime requirements identified in the DOD Mobility Requirements Study 2005, which determined the requirements to fight and win two major theater wars. However, Civil Reserve Air Fleet requirements may increase the next time mobility requirements are studied. The last mobility requirements study was limited in that it did not consider the use of excess Civil Reserve Air Fleet capacity and the ability of some commercial aircraft to carry larger cargo than standard-sized pallets.

The incentives currently in place to encourage participation in the program, especially the incentive to participate in DOD's peacetime business, might be losing effectiveness and could become disincentives in the future. Some participants are not able to bid on peacetime cargo business because their fleets do not include B-747s, the predominant aircraft DOD uses for peacetime cargo missions. GAO found that B-747s carried out 94 percent of 946 missions flown by commercial aircraft in the first 10 months of fiscal year 2002. Furthermore, over 40 percent of recent missions did not use all available space or weight limits aboard B-747s. These missions might have been carried out less expensively with smaller wide-body aircraft. Using smaller aircraft would provide more peacetime business to a greater share of program participants, thus enhancing current incentives. However, the Air Force does not have sufficient management information to identify options for selecting the best available aircraft type for the mission.

Loading a B-747 at Dover Air Force Base, Delaware



Source: U.S. Air Force.

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Abbreviations

AMC Air Mobility Command CRAF Civil Reserve Air Fleet DOD Department of Defense

MRS-05 Mobility Requirements Study 2005



United States General Accounting Office Washington, DC 20548

December 30, 2002

The Honorable Joel Hefley Chairman, Subcommittee on Military Readiness Committee on Armed Services House of Representatives

Dear Mr. Chairman:

In the event of a national emergency, the Department of Defense (DOD) will face requirements for air transportation that exceed its military airlift capabilities. To meet additional requirements, DOD can use the Civil Reserve Air Fleet, aircraft from U.S. commercial air carriers voluntarily committed and put under contract to DOD for use during emergencies. The commercial air carriers receive no compensation for their participation in the Civil Reserve Air Fleet unless they are activated, but they are given an incentive to participate by being made eligible to bid for DOD's peacetime airlift business. Air carriers are paid for missions they fly at predetermined rates based on a weighted average of their costs plus a return on investment. The Air Force's Air Mobility Command at Scott Air Force Base, Illinois, manages the Civil Reserve Air Fleet program.

Commercial air carriers experienced financial difficulties after the attacks of September 11, 2001. In your December 2001 letter, you expressed concern over the carriers' ability to respond to the requirements of the Civil Reserve Air Fleet program in the event of an activation for an emergency or a war, including the ability to provide crews that do not have National Guard or Reserve obligations. As agreed with your office, we determined whether (1) program participants could respond to an activation with the required number of aircraft and crews and in the required time frame and (2) incentives used to attract and retain program participants are effective.

To respond to your letter, we referred to the Mobility Requirements Study 2005, issued in January 2001, to determine the requirements for the Civil Reserve Air Fleet program. This study determined the airlift required to

¹ The total capacity expressed in terms of number of passengers and/or weight/cubic displacement of cargo that can be carried at any one time to a given destination by available military airlift.

meet the former national military strategy of fighting and winning two major theater wars. It does not reflect the new Defense Planning Guidance, issued in May 2002, the new national security strategy, issued in September 2002, or the airlift needed to meet that strategy.

Results in Brief

Civil Reserve Air Fleet participants can respond to an emergency or a war with the required number of aircraft and crews and within the required time frame. Currently, there are more aircraft committed to the program than are needed to fill the wartime requirements identified in DOD's Mobility Requirements Study 2005. Participants stated that they would be able to provide the required numbers of crews despite layoffs in the industry after September 11, 2001, even though some crewmembers have National Guard or Reserve commitments that would prevent them from flying for the Civil Reserve Air Fleet if it were activated. However, Civil Reserve Air Fleet requirements may increase the next time mobility requirements are studied. The last study was limited in that it did not consider excess Civil Reserve Air Fleet capacity and the ability of some commercial aircraft to carry larger than standard-sized cargo pallets, which could increase the amount of cargo the fleet is expected to carry.

The incentives currently in place to encourage participation in the program might be losing effectiveness and could become disincentives in the future, according to some program participants. Civil Reserve Air Fleet participants with 62 percent of the wide-body cargo aircraft in their fleets are not able to bid on peacetime cargo business because their fleets do not include B-747s, the predominant commercial aircraft DOD uses for peacetime cargo missions. DOD usually requests aircraft with the capacity of a B-747 because it carries more weight and can be loaded with a standard-sized pallet that also fits on military aircraft. We found that B-747s carried out 892 of 946 missions (94 percent) flown by commercial aircraft in the first 10 months of fiscal year 2002. Furthermore, over 40 percent of recent missions did not use all available space or weight limits aboard B-747s. These missions might have been carried out less expensively with smaller wide-body aircraft. Using these smaller wide-body aircraft would also provide more peacetime business to a greater share of program participants. However, the Air Force does not have sufficient management information to identify options for selecting the most efficient and economical aircraft type for the mission.

To ensure that mobility requirements are met in the most effective and economical manner, we are recommending that DOD fully assess Civil Reserve Air Fleet capabilities in any new mobility requirements studies. To enhance the effectiveness of Civil Reserve Air Fleet program incentives, we are recommending that the Air Mobility Command study the option of optimizing its use of aircraft other than B-747s for peacetime missions. DOD concurred with both recommendations and indicated that there are already two ongoing studies that could include assessments of Civil Reserve Air Fleet capabilities. We agree that these studies would address our first recommendation concerning a more thorough study of Fleet capabilities. In a subsequent discussion, a DOD official stated that DOD intends to perform an additional study that would address the second recommendation. See the "Agency Comments and Our Evaluation" section for our detailed response to DOD's comments.

Background

The National Airlift Policy,² issued in June 1987, reinforced the need for and use of the Civil Reserve Air Fleet (CRAF) program, established in 1951.³ The policy states that military and commercial airlift resources are equally important; that DOD should determine which resources must be moved by the military and which can be moved by commercial air carriers; and that commercial carriers will be relied upon to provide airlift capability beyond the capability of the military fleet. It also states that during peacetime, DOD requirements for passengers and/or cargo airlift augmentation shall be satisfied by the procurement of airlift from commercial air carriers participating in the CRAF program.

Military airlift requirements are fulfilled by a mix of both military and civilian aircraft. Currently, the military airlift fleet is comprised of 82 C-17, 110 C-5, 468 C-130, and 69 C-141 aircraft. The older C-141 aircraft are being phased out and replaced by additional C-17 aircraft. There are also 54 KC-10 aircraft, which perform both airlift and refueling missions. The CRAF program includes 927 cargo and passenger aircraft from U.S. commercial air carriers.

CRAF participants are required to respond within 24 hours of activation in the event of stage I (a regional crisis in which the Air Mobility Command's (AMC) aircraft fleet cannot meet both deployment and other traffic requirements simultaneously) or stage II (a major war that does not warrant full national mobilization).⁴ Stage III—multiple theater wars or a

² National Security Decision Directive 280, June 24, 1987.

 $^{^{\}rm 3}$ Executive Order No. 10219, 16 Federal Register 1983 (Feb. 28, 1951).

⁴ AMC Regulation 55-8, para. 2.18.

national mobilization—requires that total CRAF airlift capability be made available to DOD within 48 hours of activation. Aircraft used in stages I and II are also available in subsequent stages. In the event of activation, AMC assumes mission control, but the carriers continue to operate and support the aircraft (support includes fuel, spare parts, and maintenance). Stage I was activated for the first and only time on August 17, 1990, during Operation Desert Shield. Stage II was activated on January 17, 1991, for Operation Desert Storm. The total number of aircraft committed to CRAF (see table 1) accounts for about 15 percent of all U.S.-owned commercial aircraft forecasted for 2003. Appendix I lists the carriers participating in the CRAF program as of October 2002 and the total number of aircraft each has committed through stage III.

Table 1: Aircraft Committed to the CRAF Program by Stage and Type of Aircraft (as of October 2002)

	Cargo	Passenger	Aeromedical ^a	Total
Stage I	31	47	0	78
Stage II ^b	95	171	25	291
Stage III ^b	271	610	46	927

Source: AMC data.

^aAeromedical aircraft evacuate critical casualties, transport patients under medical supervision, and move medical crews and supplies to the theater of operations.

CRAF Participants Can Respond as Required

More aircraft are committed to the CRAF program than are needed to fulfill the wartime requirements established by the Mobility Requirements Study 2005 (MRS-05). There was a shortage of aeromedical evacuation aircraft, but this has been recently eliminated. Program participants stated that they would be capable of providing the needed levels of aircraft and crews within the necessary time frames, even with recent furloughs and with crewmembers that have National Guard or Reserve commitments. A new mobility requirements study could see an increase in the need for CRAF based on a change from the two major theater war scenario to the new strategy of planning for a range of military operations that was described in DOD's recent Quadrennial Defense Review Report, issued in September 2001. 5

^bIncludes aircraft from previous stages.

⁵ Quadrennial Defense Review Report, Department of Defense, September 30, 2001.

Under MRS-05's two major war scenario, the study assumed that both military and CRAF aircraft were needed and that CRAF would be required to move 20.5 million ton miles a day, or 41 percent of all military bulk cargo deliveries. CRAF would also carry 93 percent of all passengers and provide almost all aeromedical evacuation needs. In fiscal year 2002, there were only 31 of the 40 B-767s required to be available for conversion to aeromedical evacuation. However, commercial carriers increased their commitment to 46 of these aircraft for fiscal year 2003. Table 2 compares the requirements for a stage III CRAF activation with commitments by program participants.

Table 2: Stage III CRAF Requirements and Commitments (as of October 2002)

	Required	Committed
Cargo	120 wide-body equivalents ^b	227 wide-body equivalents ^b
Passenger	136 wide-body equivalents ^b	276 wide-body equivalents ^b
Aeromedicala	40 B-767 aircraft	46 B-767 aircraft

Source: AMC data.

Officials from CRAF air carrier participants that we visited confirmed that they would be able to provide the agreed levels of airlift capacity within the necessary time frames and that the turmoil in the airline industry after the attacks of September 11, 2001, would not affect their ability to do so. The officials said they would also be able to provide at least four flight crews per aircraft (crewmembers must also be U.S. citizens), as they are required to do by AMC Regulation 55-8. This is in spite of the fact that some carriers have had to furlough pilots during the recent economic downturn and that employees with National Guard or Reserve commitments cannot be included in available crew lists. The same regulation requires that commercial carrier personnel with military Reserve or National Guard commitments not be considered in the cockpit crew-to-aircraft ratio. They can, however, be used in CRAF carrier work until their military units have alerted them of a recall to active duty. Officials from the carriers we visited said they monitor their crewmembers' reserve commitments carefully and usually maintain a higher crew-to-plane ratio than DOD requires. For example, one carrier we visited operates with a crew-to-plane ratio of 10 to 1, instead of the 4 to 1 DOD requires for CRAF carriers. DOD also inspects carriers annually, and

^aDOD requires only B-767 planes for the aeromedical evacuation mission.

^bA wide-body equivalent is a relative measure of carrying capacity that is based on the capacity of one Boeing 747-100 aircraft, which AMC planning factors estimate at about 90 tons of cargo or 360 passengers.

the inspectors have been satisfied that the carriers could meet the crew-to-plane ratio.

Mobility Requirements Study Limited CRAF Contribution

The MRS-05 did not consider CRAF's full capacity, and it set a ceiling of 20.5 million ton miles on daily CRAF airlift requirements. According to DOD officials, the study restricted CRAF cargo capacity to 20.5 million ton miles per day because DOD's airfields can accommodate only a certain number of aircraft at the same time. Also, they stated that using additional CRAF aircraft would reduce efficiency because of the type of cargo CRAF is modeled to carry. They said that commercial aircraft can take longer to unload than military aircraft and require special material handling equipment to be available at an off-loading base. Military aircraft, on the other hand, do not need specialized loading equipment because they are high-winged and lower to the ground.

BOEING 747-200

Figure 1: Loading a B-747 at Dover Air Force Base, Delaware

Source: U.S. Air Force

Furthermore, the MRS-05 did not consider the ability of the commercial industry to carry different cargo sizes. The MRS-05 modeled CRAF aircraft carrying only bulk cargo. According to Air Force officials, the U.S. commercial cargo fleet has limited ability to carry oversized cargo and no ability to carry outsized cargo. They stated that it is difficult, from a planning perspective, to model CRAF aircraft carrying oversized cargo because the models would need to distinguish between the types of oversized cargo and the types of aircraft. They also stated that using more CRAF capacity than the 20.5 million ton mile limit would flow more bulk cargo into a theater instead of oversized and outsized unit equipment brought in by the larger military aircraft.

In reality, however, commercial aircraft do carry some oversized cargo. DOD is examining how much oversized equipment can be moved by CRAF so that this capability can be included in future mobility studies. DOD's Defense Planning Guidance, issued in August 2001, requires that mobility requirements be reevaluated by 2004, and DOD officials believe that future requirements will be higher because of the increased number of possible scenarios included in the guidance. We believe that a study that also takes into consideration excess CRAF capacity and the types of cargo that CRAF can accommodate could provide a more realistic picture of needs and capabilities. It could also mitigate some of the concerns about airfield capacity and flow of cargo into a theater if CRAF aircraft could move some of the oversized cargo. This could get the larger cargo to a unit as it was needed, instead of bulk cargo, which may not be as time-critical.

CRAF Incentives May Be Losing Effectiveness

One of the key stated incentives of the CRAF program—the ability to bid on peacetime government business—may be losing its effectiveness because DOD uses almost exclusively one type of aircraft, the B-747, for its peacetime cargo missions. Over 94 percent, or 892, of 946 wide-body missions flown by CRAF participants in the first 10 months of fiscal year 2002 were carried out by B-747s, which accounted for only 38 percent of

 $^{^6}$ Bulk cargo is cargo that can be loaded on a standard pallet without exceeding any of its usable dimensions. A standard pallet is 84 inches long by 104 inches wide by 96 inches high.

⁷ Outsized cargo is cargo that exceeds the capabilities of the C-130 and C-141B aircraft and requires the use of a C-5 or a C-17 aircraft. It is cargo that is more than 810 inches long by 117 inches wide by 105 inches high in any direction. Oversized cargo is any single item that exceeds any one of the dimensions of a standard pallet, but can be loaded on a C-141, C-130, or KC-10 aircraft.

wide-body cargo aircraft committed to the CRAF program. Some major CRAF participants who do not have B-747s have suggested that they might reduce or end their participation in the program if they do not receive any business in return for their commitment. This could have a serious effect on the program's ability to meet future requirements, especially if those requirements increase due to the change in focus from two major theater wars to a range of military operations outlined in the recent Quadrennial Defense Review.

Only carriers that participate in the CRAF program can bid on peacetime mobility business. Carriers can bid on a percentage of peacetime business in direct proportion to their commitment to the program. Participants earn mobilization value points, which are based on the number and type of committed aircraft. In assigning mobilization value points, DOD measures each volunteered passenger or cargo aircraft against the capacity and airspeed of a B-747-100. Participants in the aeromedical evacuation segment of CRAF receive double the mobilization value points because of the significant reconfiguration their aircraft (B-767s) must undergo. The points are used to determine how much commercial business each participant can bid on out of the total, which in fiscal year 2002 more than doubled to \$1.28 billion from \$572 million the previous year (see app. II for annual amounts since fiscal year 1998).

Participants with 62 percent of the wide-body cargo aircraft committed to CRAF are not able to bid on most peacetime cargo business because they do not have B-747s. An AMC official said that most requests for cargo aircraft require a 90-ton capacity, the same as that of a 747-type aircraft but slightly more than those of other wide-body aircraft such as the MD-11 (86 tons) or the DC-10 (75 tons). One carrier with over 100 wide-body cargo planes smaller than B-747s committed to the program (and accounting for 41 percent of all total mobilization value points awarded to cargo carriers) received only about 4 percent of peacetime cargo business in fiscal year 2002. By contrast, a carrier committing 10 B-747 type aircraft (7 percent of total cargo points) flew 37 percent of all peacetime cargo business.

AMC officials claim that they must use 90-ton capacity aircraft because they need the flexibility and capacity to clear ports as quickly as possible. The B-747 can carry more and larger cargo than other wide-body aircraft because it has more capacity and larger doors. Officials also noted that the B-747 can carry standard-sized bulk cargo pallets that are the same size as those used by commercial industry, the Defense Logistics Agency, and other DOD activities and contractors. Standard pallets also fit aboard all

military cargo aircraft. In order to fit aboard other wide-body aircraft such as the DC-10 or the MD-11, cargo handlers at military bases must disassemble and rebuild the standard pallets to fit the aircrafts' lower profile (see fig. 2).

B-747 MD-11

Figure 2: B-747 and MD-11 Cross-Section Views with Cargo Pallets

Source: AMC Pamphlet 24-2 (Dec. 1, 2001), as modified by GAO.

Some cargo carrier officials said they could not bid on the amount of peacetime business they believe they are entitled to based on their CRAF participation. Consequently, they indicated that unless this problem improves, they might reduce or end their participation at some point in the future. AMC officials acknowledged that the requirements from Operation Enduring Freedom, DOD's operation in Afghanistan, amounted to the equivalent of a stage I activation. Activation was avoided because CRAF participants volunteered the airlift capability needed in fiscal year 2002. Although commitments to the CRAF program currently exceed requirements, this situation could change if some cargo carriers continue to be left out of the peacetime business and eventually decide to reduce or terminate their participation in the program. In our opinion, DOD cannot afford to lose CRAF participants, particularly in view of a new mobility requirements study and a potential increase in requirements.

Furthermore, some cargo carriers stated that the CRAF B-747s are not flying with full loads and claimed that it would be less expensive to use smaller wide-body aircraft with lower per-mile costs. We obtained mission data and found that almost half of the 892 CRAF missions flown on B-747s in the first 10 months of fiscal year 2002 did not use all available space or weight capacities. These loads might have fit on smaller wide-body

aircraft, which would have cost less to fly. B-747 aircraft are more expensive than other wide-body aircraft, such as the MD-11, which have lower per-mile operation costs. See table 3 for a cost comparison by plane type for a round-trip flight from Dover Air Force Base to Ramstein Air Force Base, Germany.⁸

Table 3	3: Cost	Comparison	bv	Aircraft Type
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Aircraft type	Capacity	Trip cost
B-747	90 tons	\$200,356
MD-11	86 tons	\$191,451
DC-10	75 tons	\$166,963

Source: AMC data.

Over 40 percent of these recent missions flown by B-747s did not utilize all the available pallet positions and carried less than 55.7 tons. In fiscal year 2002, AMC officials used the 55.7-ton mark as a breakeven point—the point at which the per-pound cost that the customer pays to have the cargo shipped equals the B-747's per-mile cost that AMC pays the carrier to fly the mission. We were unable to determine whether a smaller, more economical aircraft could have been used for these missions because, at the time we requested the data, DOD was not obtaining data on cargo volume. However, it has since begun to accumulate this information, which will help determine whether aircraft are flying at full capacity.

Military port handlers assured us that DOD's use of B-747 aircraft during peacetime would not decrease their capability to build and load different types of pallets on other types of aircraft, which AMC data show account for 62 percent of the CRAF wide-body cargo fleet, during wartime. They stated that they "frequently" build pallets and can use available templates for nonstandard shapes. When we questioned how effectively they could do this in the very first and most urgent phases of a conflict, they stated that during wartime, supplies such as ammunition and food are delivered in pallets that can be loaded directly aboard smaller wide-body planes. According to port officials, loading aircraft is easily accomplished once the pallets are built.

⁸ CRAF participants are paid at a predetermined per-mile rate based on the type of aircraft flying the mission. The per-mile rate is paid regardless of the weight carried on the mission.

Another incentive for passenger air carriers to participate in the CRAF program is annual government air passenger business under the General Services Administration's City Pairs program. General Services Administration officials said that passenger air carriers have expressed dissatisfaction because they believe the program is too restrictive and does not allow them to manage aircraft capacity to generate the highest profit. However, the 2003 contract includes some changes that program officials believe will resolve many of the carriers' concerns.

Conclusions

The upcoming reevaluation of mobility requirements may increase the need for CRAF in the future. However, the last study did not consider some factors—such as the ability of commercial aircraft to carry different sized cargo—that, if included, could provide more accurate and realistic requirements. The last study also set a ceiling on the amount of cargo carried by CRAF that provided the needed flow of cargo into a theater and that DOD's infrastructure could process efficiently. This figure needs to be revalidated so that the next mobility requirements study can provide decision makers accurate and helpful information on true needs and capabilities.

There are strong indications that some major program participants are dissatisfied with their share of a key CRAF incentive, the opportunity to bid on peacetime mobility business, because DOD uses almost exclusively only one type of aircraft for peacetime cargo missions. If they are unable to see some benefit from the incentive program, some participants might reduce or end their participation in the program. This could cause difficulties in meeting requirements at a time when participation in peacetime business or CRAF activation is crucial. DOD needs to study ways to expand the use of smaller wide-body aircraft to ensure an equitable distribution of the peacetime business and determine whether smaller wide-body aircraft could carry out a higher proportion of its peacetime missions as efficiently as, and possibly more economically as, the B-747 does.

Recommendations for Executive Action •

We recommend that the Secretary of Defense direct that

the reevaluation of mobility requirements mandated by the Defense Planning Guidance include a more thorough study of CRAF capabilities, to include the types of cargo CRAF can carry and how much CRAF aircraft can land and be unloaded and serviced at military bases, and the Air Mobility Command determine whether smaller wide-body aircraft could be used as efficiently and effectively as the larger B-747-type planes to handle the peacetime cargo business that DOD uses as an incentive for CRAF participants.

Agency Comments and Our Evaluation

In written comments on a draft of this report, DOD concurred with our recommendations. However, DOD believed it would be more appropriate to ensure that ongoing study efforts be given greater emphasis and require that any resulting reports specifically address our issues. We agree that these studies could address our first recommendation concerning a more thorough study of CRAF capabilities. In a subsequent discussion, a DOD official stated that DOD intends to perform an additional study that would address the second recommendation.

DOD's comments are presented in their entirety in appendix III.

Scope and Methodology

We used the MRS-5, DOD regulations, and discussions with officials at the U.S. Transportation and U.S. Air Mobility Commands, located at Scott Air Force Base, Illinois, to establish the aircraft and time frame requirements for the CRAF program. We obtained and reviewed data from and interviewed officials at the U.S. Transportation Command, U.S. Air Mobility Command, Office of the Secretary of Defense, and representatives of six CRAF participants, which represent about 38 percent of the total CRAF aircraft commitment, to conclude whether the participants could respond to an activation with the required number of aircraft and crews and in the required time frame.

We also interviewed representatives of six CRAF participants, representing both passenger and cargo air carriers, to determine whether the incentives used to attract and retain program participants are effective. For clarification on the incentives and how they are used, we referred to DOD regulations and interviewed officials at the U.S. Transportation Command, the U.S. Air Mobility Command, and the General Services Administration. We analyzed AMC mission data to determine the capacity at which aircraft were flying. We met with officials at the 436th Aerial Port Squadron at Dover Air Force Base to discuss cargo and aircraft loading.

We conducted our review between January and October 2002 in accordance with generally accepted government auditing standards.

We are sending copies of this report to the Secretary of Defense, the appropriate congressional committees, and the Director, Office of Management and Budget. We will also make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you have any questions about this report, please contact me at (757) 552-8100. See appendix III for major contributors.

Sincerely yours,

Neal P. Curtin

Director, Defense Capabilities

and Management

Appendix I: Civil Reserve Air Fleet Participants and Total Number of Aircraft Committed at Stage III as of October 2002

Passenger carriers	Number of aircraft committed at stage III as of October 2002
Alaska Air	42
America West	10
American Airlines	100
American Trans Air	62
Champion Air	7
Continental Airlines	120
Delta Air Lines	37
Frontier Airlines	2
Hawaiian Airlines	4
Miami Air	6
Midwest Express	2
North American Airlines	4
Northwest Airlines	55
Omni Air International	5
Southwest Airlines	22
Spirit Airlines	19
Sunworld International	1
United Airlines	96
US Airways	9
World Airways	7
Cargo carriers	
Airborne Express	3
Air Transport International	13
Arrow Air	10
Atlas Air	32
DHL Airways	16
Evergreen International	15
FEDEX Airlines	111
Gemini Air Cargo	16
Lynden Air	3
Northern Air	2
Northwest Airlines	12
Omni Air International	2
Polar Air Cargo	16
Southern Air	4
UPS Airlines	11
World Airways	5
Aeromedical evacuation	
Delta Air Lines	35
US Airways	11

Source: Air Mobility Command.

Appendix II: Department of Defense Commercial Airlift Contracts

The Department of Defense (DOD) uses commercial carriers for two different kinds of peacetime airlift moves: The first (called fixed buy) is a set contract for "channel flights" made on a regular weekly schedule from U.S. bases to fixed points across Atlantic and Pacific routes. The second (called expansion buys) includes airlift bought after the start of the fixed buy contract to support exercises, contingencies, special airlift assignment missions, and growth in channel requirements. From fiscal years 1992 through 1997, DOD contracts for commercial passenger and cargo business averaged over \$611 million a year. From fiscal years 1998 through 2001, contracts increased to an average of almost \$640 million a year. In fiscal year 2002, contracts increased significantly to almost \$1.3 billion, which Air Mobility Command officials attributed to missions flown in support of Operation Enduring Freedom, the operation in Afghanistan. (See table 4.)

Dollars in millions						
		Fiscal year				
	Type of buy	1998	1999	2000	2001	2002
Passenger	Fixed	\$158.31	\$158.58	\$159.89	\$182.33	\$339.57
	Expansion	175.15	176.40	181.69	179.68	187.67
Cargo	Fixed	187.28	162.08	96.23	173.5	165.31
	Expansion	111.07	204.91	192.57	36.9	587.89
Miscellaneous		14.50	17.70			
Total		\$646.49	\$710.70	\$629.38	\$572.44	\$1,280.45

Source: Air Mobility Command.

Appendix III: Comments from the Department of Defense



OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON WASHINGTON, DC 20301-3000

DEC - 9 2002

Mr. Neal P. CurtinDirector, Defense Capabilities and ManagementU.S. General Accounting OfficeWashington, DC 20548

Dear Mr. Curtin:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "MILITARY READINESS: Civil Reserve Air Fleet Can Respond as Planned but Incentives May Need Revamping", dated November 8, 2002 (GAO-03-278).

The draft report recognizes that DoD, in partnership with the Civil Reserve Air Fleet (CRAF), can respond to an emergency or war with the required number of aircraft and crews and within the required timeframe. However, the GAO draft report questions whether the incentives currently in place to encourage participation in the program might be losing effectiveness and could become disincentives in the future. The question of CRAF incentives is subject to annual review and discussion, not only between the AMC and USTRANSCOM staffs, but also with CRAF carrier participants.

DoD concurs with GAO's recommendations; however, rather than direct unrelated new studies on these issues, we believe it would be more appropriate to ensure that ongoing study efforts be given greater emphasis and require that any resulting reports specifically address the GAO issues.

The detailed DoD comments addressing the report are provided in enclosure 1. The DoD appreciates the opportunity to comment on the GAO draft report.

Sincerely,

Earl B. Boyanton, Jr.

Assistant Deputy Under Secretary (Transportation Policy)

Enclosure



GAO-03-278/GAO CODE 350148

"MILITARY READINESS: CIVIL RESERVE AIR FLEET CAN RESPOND AS PLANNED BUT INCENTIVES MAY NEED REVAMPING"

DEPARTMENT OF DEFENSE COMMENTS TO THE RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommended that the Secretary of Defense direct that the reevaluation of mobility requirements mandated by the Defense Planning Guidance include a more thorough study of CRAF capabilities, to include the types of cargo CRAF can carry and how much CRAF aircraft can land and be unloaded and serviced at military bases. (Page 13/Draft Report).

DoD RESPONSE: Concur. CRAF aircraft are not built to a single standard and these differences impact modeling CRAF capabilities when evaluating mobility requirements. Differences include door sizes, floor strengths, internal configurations and tie-down requirements. Differences in construction preclude the guarantee that a specific piece of cargo will fit on a specific CRAF aircraft. Additionally, MRS -05 was used as a data source. It should be noted that this study is a near exclusive view of lift requirements outside the CONUS and doesn't address the total requirement. Two Defense Planning Guidance directed studies, the Operational Availability study and the Advance Mobility Concepts study, are currently considering CRAF cargo factors.

RECOMMENDATION 2: The GAO recommended that the Secretary of Defense direct that Air Mobility Command determine whether smaller wide-body aircraft could be used as efficiently and effectively as the larger B-747-type planes to handle the peacetime cargo business that DoD uses as an incentive for CRAF participants. (Page 13/Draft Report).

Dod RESPONSE: Concur. The GAO sampling period was the first ten months of fiscal year 2002. This coincided with support for Operation ENDURING FREEDOM. During this period, CRAF was considered flying under wartime business rules even though it wasn't activated. An imbalance, while smaller, exists in peacetime and is due to the need to balance the readiness requirements of the organic fleet, impact on aerial port operations, time definite delivery and the CRAF commitment. Some offset is realized by allowing free transfer of mobilization value points, which determine business entitlement, between CRAF members and within teaming arrangements. Within teaming arrangements, the large scheduled carriers, including those flying MD-11/DC-10 aircraft, are reimbursed for transferring their business entitlement to smaller charter carriers.

Appendix IV: GAO Contacts and Staff Acknowledgments

GAO Contacts	William C. Meredith (202) 512-4275 Ann Borseth (202) 512-5222
Acknowledgments	In addition to those named above, Lawrence E. Dixon, Patricia Lentini, Stefano Petrucci, and Kenneth Patton made key contributions to this report.

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