

ISSUE

Proper course of action for the selection of the future DOD military cargo aircraft.

BACKGROUND

1. There is a national consensus that the U.S. has a serious deficiency in meeting our critical military airlift requirements.
2. The Air Force is charged with the responsibility to perform this mission and has reviewed its options on whether to purchase an existing aircraft or to develop a modern technology aircraft.
3. The C-X (C-17) is intended as a cargo aircraft capable of carrying outsized cargo such as tanks, howitzers and other military equipment over intercontinental distances and into small austere airfields.
4. From October 1980 to August 1981 the Air Force held a competition to determine the best aircraft to meet its needs, and they chose the McDonnell Douglas C-17 design as the clear winner over Boeing and Lockheed designs for a new aircraft. The Lockheed Corporation also proposed the C-5 in this competition but the aircraft was found not able to meet the military requirements.
5. The operators (Air Force) and users (Army and Marines) of military cargo aircraft have all supported the development and purchase of a new aircraft (C-17).
6. OSD has received an unsolicited proposal from the Lockheed Corporation to reopen the C-5 line and procure additional C-5's. (The C-5 has been out of production for almost nine years.)
7. The Air Force has not been allowed to brief the appropriate Congressional committees on its selection of the C-17 or the need for a new rather than an old aircraft.
8. The FY 82 Authorization Conference agreed to provide (in a new line item entitled Airlift Enhancements) \$15 million for research and development and \$50 million for procurement. The report language states that DOD should review all options on how to best meet its airlift requirements and after a decision is made notify the appropriate committees.
9. The FY 82 Appropriations Conference did not provide R&D monies, but approved \$50 million for procurement. If OSD determines to develop a new aircraft, the funds will have to be reprogrammed to an R&D account.

CONSIDERATIONS

1. After an exhaustive evaluation, the USAF made a valid selection of the C-17 as the future airlifter.
2. The C-5 was found to be unable to meet the Army and Marine requirements for rapid combat force deployment.
3. The true C-5 costs for modernization of equipment, reopening the production line, as well as maintaining and operating the force are not contained in the Lockheed proposal.
4. The C-17 requires one half the flight crew and one half the maintenance crew as the C-5. The C-17, which emphasizes simplicity of design, requires less than one third the maintenance man hours per flight hour of the C-5.
5. The C-5 is not as cost effective as the C-17 (based on USAF evaluation of acquisition and life cycle costs) and cannot enter the USAF inventory much earlier than a new aircraft.
6. The full costs of development of the C-17 are contained in the fixed price incentive contract which the Air Force has negotiated with MDC. There is little risk in the program because the design incorporates only proven technology. All the key engineering and production talent is in place. In fact the work is urgently needed to maintain the Douglas Aircraft Company's DC-9 and DC-10 commercial aircraft viability against Boeing and Airbus.
7. The OSD has been complaining of lack of Congressional support for the C-17, but the USAF has not been allowed to brief its case on Capitol Hill to the Authorization and Appropriation committees. If given the opportunity to present its entire case -- widespread support for C-17 will be forthcoming.
8. Politically, the only firm support for the C-5 is the Georgia delegation, and it is specifically being pushed by Congressman Bo Ginn in his democratic gubernatorial race.

RECOMMENDATIONS

1. Now that Congressional action on the FY 82 defense bills has been completed, it is urgent to preclude an OSD decision on this matter that is not fully supported by the Administration and the White House.
2. The civilian leadership in OSD has thoroughly reviewed this subject with the USAF, Army and Marines without being able to change these services' unanimous decision. OSD should accept the strong recommendation of the military operators and users for procurement of the C-17.

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United States Senate

COMMITTEE ON ARMED SERVICES

WASHINGTON, D.C. 20510

December 8, 1981

PHILIP B. DAWSON, STAFF DIRECTOR AND CHIEF COUNSEL

The Honorable Ted Stevens
Chairman, Subcommittee on Defense
Committee on Appropriations
United States Senate
Washington, D.C. 20510

Dear Ted:

I would like to congratulate you on your outstanding management of the Defense Appropriations Bill on the Senate floor last week. There were a number of difficult and controversial issues which you handled most skillfully.

Looking forward to the conference on this bill, I would like to share with you my views on the C-X aircraft program on which the Senate and House have taken different positions.

As you know, the Senate has appropriated funds for airlift augmentation at the authorization level with \$50 million in procurement for widebody airlift aircraft and \$15 million in R&D for airlift enhancement. This R&D effort does not preclude additional work on the C-X aircraft alternative. The House has also appropriated \$50 million for widebody airlift aircraft procurement. However, the House has not appropriated R&D funds for airlift enhancement and in the House Appropriations Committee's report directs the Air Force "to abandon the C-X program".

I fully recognize that the Department of Defense (DoD) has failed over the past two years to justify the development and acquisition of a new design C-X airlift aircraft. While this is true, the Congress does not have sufficient information to conclude that the C-X aircraft is not the most cost-effective solution to U.S. airlift augmentation needs. The Congress has not received definitive information on the C-X aircraft from the source selection process, on the costs of procuring additional C-5 aircraft, and on DoD's overall airlift acquisition strategy.

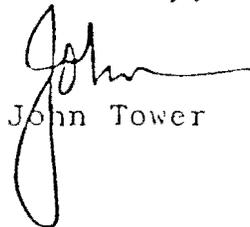
In light of the relatively limited information presently available to the Congress, it would be premature at this time to eliminate further consideration of the C-X aircraft alternative as the House proposes.

With respect to augmentation of U.S. airlift capabilities, the Congress must be careful not to allocate resources for a new design aircraft that provides only limited additional benefits at substantially greater cost. Existing aircraft may be able to fulfill an acceptable portion of U.S. airlift augmentation needs. Despite holding these views, I cannot in good conscious suggest that the Congress make a judgment on the C-X program at this time before the facts are fully presented.

In the absence of specific program recommendations by the Department of Defense, the conference report on the Defense Authorization Act seeks to ensure congressional control over funds appropriated for airlift programs in fiscal year 1982. The report directs that none of the funds appropriated in fiscal year 1982 or C-X R&D funds remaining available from fiscal year 1981 are to be obligated until 30 days after DoD has provided to the Committees on Armed Services of the Senate and House of Representatives its recommendations for an airlift augmentation program and justification for such program.

While the delays in the C-X program and thereby in the airlift augmentation efforts have been most troubling, I urge you to insist in the conference on the Senate position on airlift enhancement R&D which envisions the possibility of additional consideration of the C-X aircraft alternative.

Sincerely,



John Tower



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, D.C.

16 DEC 1981

Dr. James P. Wade, Jr.
Principal Deputy Under Secretary of Defense
for Research and Engineering

Dear Jim

I am writing to give you some informal and personal observations concerning the C-17/C-5 debate. With all the current discussion, both public and private, concerning airlift and national mobility, my views as a recent operations officer for an Allied Tactical Air Force in Europe and an ex Wing Commander at a European main operating base (Bitburg) may be helpful.

One of the great problems in trying to choose the best aircraft for this nation to buy to handle the military airlift requirements for the next 30 to 40 years is that national mobility requirements are terribly dependent on scenario assumptions. Therefore, any aircraft can be made to appear as the least expensive acquisition by simply changing the scenario to favor a competing aircraft's capabilities.

Where does this lead us? Since any airlift aircraft will reduce the shortfall and can be made to appear the most attractive by scenario manipulation, the best long term solution for the nation may become obscured by a deluge of salesmen, brochures, and argumentation.

At this point I feel we should review the original requirements developed by the Services - without reference to a specific aircraft. Looking at user demands (Army, Air Force, Navy and Marines) and current capability, the C-X task force developed a Mission Element Needs Statement (MENS) that described the nation's requirements for a new airlift aircraft. The Congressionally Mandated Mobility Study added emphasis and provided guidance for an attainable ton-miles-per-day goal.

As a former Commander of a Tactical Fighter Wing in Europe, I can verify the finding of the C-X task force for that area. In a warfighting scenario, my airfield at Bitburg would be saturated by fighter operations; my parking areas were too small for outsize capable airlifters or jumbo jets; I could expect regular damage to my runways that would restrict usable length; and, yet, I needed the capability to receive outsize cargo. An outsize cargo capable aircraft that had the performance to land, take off, and maneuver on small, austere airfields would have given me the required capability to plan for and execute resupply and augmentation during contingencies.

Speaking to my Army counterparts in NATO, I found that their requirements for small, austere airfield operations during resupply, augmentation, and employment were similar, but on a much greater scale. Their mobility requirements, including a large proportion of outsize cargo, had to be filled by delivery to an aerial port of delivery (APOD) and then transshipment to their operating location by C-130s or surface means. This ruled out outsize air movement and slowed the responsiveness of the mobility system to the operational commander.

My eight years of operational experience in NATO and review of the other CX/CMMS scenarios lead me to only one conclusion: The Air Force accurately described the national airlift aircraft requirement in its C-X MENS and RFP. The requirement for a military airlift aircraft that can carry outsize, oversize, or bulk cargo over intercontinental ranges; operate on main operating bases without degrading the launch, recovery, or service of combat aircraft, even while subject to enemy attack; support operational commanders at the small, austere airfields in the battle area; and deliver by all known means (airland, air-drop, extraction) is still valid.

We need an outsize airlifter that can operate when we are at war and the bombs are falling on very busy airfields in overseas areas. During my 2 years at Bitburg, the C-5 landed there once to deliver the F-15 simulator. It could not get off the runway since the taxiways were too narrow. Even if it could get off the runway there was practically no place to park it without seriously interfering with peacetime operations. Needless to say the wing commanders at Hahn, Bitburg, Zweibrucken, Sembach, etc., would not have much trouble choosing between C-17s and C-5s for the outsize airlifter of the future. I would be remiss if I didn't reflect their point of view. Certainly the operational commander's concerns should have some weight in the decision calculus of OSD.

Most people concentrate on that aspect of the C-X requirement calling for "small, austere" airfield capability and don't realize that interdicted main base operations were included in the requirement defined as "small, austere." Having observed the Japanese drop bombs on Hickam and having watched what happened at Danang when rockets hammered away at the flight line, I was always curious about how little consideration is given in airlift analyses to doing the airlift job when a war is going on and only parts of runways and taxiways are available for take off and landing. When these considerations are thrown in the C-17, already a most attractive outsize candidate, becomes much more attractive.

Sincerely



PERRY M. SMITH
Major General, USAF
Director of Plans, DCS/P&O

MCDONNELL DOUGLAS



SANFORD N. McDONNELL
Chairman and Chief Executive Officer

22 December 1981

Mr. James A. Baker III
Chief of Staff
The White House
Washington, D. C. 20500

Dear Mr. Baker:

The Defense Department recommended the cancellation of eight KC-10 tanker/cargo aircraft for FY'82 which would have put our Douglas Aircraft Company division out of the wide-body jet transport business and, with the pending demise of the Lockheed L-1011, would give Boeing a monopoly on large commercial jet transports, reference the enclosed letter to Mr. Ed Meese. Congress put four of the eight KC-10's back into the FY'82 Appropriations Bill, thereby giving us a tenuous reprieve for about half a year. We understand the current DoD plan for FY'83 does not include any KC-10's.

OSD is now considering an option which could literally determine the survival of the Douglas Aircraft Company as a large jet transport producer. Douglas won an extensive nine month competition against Boeing and Lockheed for the C-X large cargo transport aircraft, now called the C-17, designed to meet a serious shortfall in military airlift capability. The Chiefs of Staff of the U. S. Air Force and the U. S. Army, and the Commandant of the U. S. Marines have combined together to urge OSD to proceed with the procurement of the C-17 in FY'82. Congress has recognized the need for this airlift enhancement with monies in the FY'82 Appropriations Bill; however, OSD is considering an unsolicited proposal from Lockheed to revive the troubled C5 production line, which has been shut down now for almost nine years and which does not meet the requirement for which the C-17 is intended.

OSD has not been able to convince the three Chiefs of Staff that the C-17 is not the right course of action. Please urge OSD to accept the strong recommendation of the military operators and users for procurement of the C-17.

Sincerely,

SNM/cr

Enclosure

SANFORD N. McDONNELL
Chairman and Chief Executive Officer

18 September 1981

Mr. Edwin Meese III
Counsellor to the President
The White House
Washington, D. C. 20500

Dear Mr. Meese:

It has recently come to our attention that the U. S. Government is planning to cancel the 8 FY '82 KC-10 Tanker/Cargo aircraft for the U. S. Air Force. As you know these airplanes have been authorized by the Armed Services Committees of both Houses. If this action is taken the DC-10/KC-10 production line at the Douglas Aircraft Company in Long Beach, California will be completely shut down at the beginning of calendar year 1983, an important factor which probably was not considered when this proposed decision was made.

Recognizing the severity of your budget problems and the necessity of reviewing overall defense spending priorities, the termination of the DC-10/KC-10 production line is ill advised for both economic and national security reasons.

o Economic Impact:

- o At the Douglas Aircraft Company in Long Beach 5800 jobs would be terminated and we estimate a total of about 17,400 jobs in California alone would be lost.
- o In the current depressed commercial airline market the airlines are not ordering many DC-10 airliners but we anticipate between 1985 and 1995 a 335 aircraft market for DC-10 derivatives valued at approximately \$43 billion and providing a U.S. balance of payments benefit of approximately \$30 billion. The FY '82 KC-10 deliveries in CY 1983 keep the line open until the projected commercial market picks up again.
- o National Security: The USAF would lose
 - o An immediate and significant tanker and cargo aircraft capability required for execution of the Rapid Deployment Force concept.

- o A future option for additional KC-10 aircraft.
- o A competitive tanker alternative to the 20 year old KC-135.

In summary the cancellation of the 8 FY '82 KC-10 aircraft has serious ramifications far beyond this potential initial action. For the aforementioned reasons I request your immediate personal review of this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Sanford N. McDonnell". The signature is written in a cursive style with a large initial "S".

Sanford N. McDonnell
Chairman and
Chief Executive Officer
McDonnell Douglas Corporation

City Hall-Style Politics Spill Over Into Pentagon Plane Selection

By George C. Wilson
Washington Post Staff Writer

A Cinderella plane called the CX will most likely be overshadowed again by the B1 bomber, MX missile and other glamor weapons as the Senate resumes debate next week on how the Pentagon should spend its billions.

But behind the scenes, a fight is raging over who should build the CX cargo plane for carrying war gear to distant places like the Persian Gulf. Opposing lineups include Air Force-Army vs. civilians in the Pentagon; Lockheed vs. McDonnell Douglas in the aerospace industry; Georgia vs. Missouri in Congress.

Rep. Bo Ginn (D-Ga.), who is running for governor of Georgia, has even tried to legislate McDonnell Douglas out of the competition in favor of his home state defense contractor, Lockheed. McDonnell Douglas has threatened to sue the Pentagon if it works out that way.

The battle of the CX, which stands for Cargo Experimental, provides a glimpse of the military-industrial complex in action. Among other things, the CX fight dramatizes how politics, city hall-style, can spill over into the struggle for Pentagon contracts.

On Aug. 28, it sounded like McDonnell Douglas had the CX contract wrapped up. The official Air Force press release said the St. Louis contractor had been selected after seven months of evaluating competing proposals from Boeing and Lockheed. But the Air Force left itself a loophole, declaring "the selection of McDonnell Douglas as the prime contractor does not represent an Air Force commitment to build the CX."

This left open the possibility of settling for a militarized version of the Boeing 747 or Douglas DC10 commercial airliners or an updated Lockheed C5.

In September, Edward C. Aldridge, undersecretary of the Air



The CX cargo transport, shown in this artist's sketch, is the subject of push-pull between military, civilians, aerospace industry companies and congressmen from rival states.

Force, seemed to have closed that loophole by informing Defense Secretary Caspar W. Weinberger that his service's analyses had concluded that an existing plane would not do the job, that a new plane, the CX, would have to be built. To Air Force professionals, this meant the McDonnell Douglas CX, designated C17, would be its cargo plane of the future.

Neither Lockheed nor Pentagon civilians were willing to accept the C17 as inevitable. Lockheed rushed in with an offer to build 50 C5s at a fixed price.

The Pentagon's research director, Richard D. DeLauer, told *The Washington Post* that the Lockheed

proposal is being evaluated, with the decision expected "in a couple of weeks." An executive of McDonnell Douglas confirmed that his firm had written the Pentagon it would consider an award to Lockheed at this late date a violation of the procurement process and might seek relief in court.

The Army, as well as the Air Force, favors the C17 which would carry Army gear to troublespots. An internal Army memo obtained by *The Post* states that Pentagon civilians delayed informing Congress about the Air Force rejection of the idea of using existing aircraft.

"Two separate meetings [Oct. 13 and 16] have been held with Mr.

[Frank C.] Carlucci [deputy secretary of defense] and Dr. DeLauer to again present the Army's and the Air Force's position that the C17 is the best airlift aircraft solution for the nation," the memo says.

"During both meetings, Mr. Carlucci acknowledged that the C17 was the aircraft that best met the services' requirements; however, cost was the important factor to sell the program on the Hill. He charged the Air Force to develop comparative data to better determine the cost of the C5 and definitize the Lockheed proposal in order to better compare the two proposals."

Despite this controversy, congressional committees that oversee the

Pentagon have shown little interest in delving into the latest CX flap, even though some Air Force leaders are eager to explain why they want the McDonnell Douglas C17, not the Lockheed C5 remake.

The congressional coolness could stem from the disillusionment the committees expressed with previous CX presentations.

Lockheed, possibly to help it counter any adverse Air Force testimony on its C5 proposal, has hired as a consultant former general Alton D. Slay, who was commander of the Air Force Systems Command when he retired in February. It is standard practice among defense contractors to employ retired officers who have access to the old boy network.

Ginn and Sen. Thomas F. Eagle-

ton (D-Mo.) have been busy on behalf of their constituent contractors, Lockheed of Marietta, Ga., and McDonnell Douglas of St. Louis. Ginn, a member of the House Appropriations Committee, managed to get this language in its report on the Pentagon's money bill:

"Considering the present shortfall of airlift capability for the Rapid Deployment Force, the committee has included \$50 million for the immediate procurement of the best wide-bodied aircraft for the strategic airlift mission.

"Examples of aircraft in this category include C5s, KC10s, 747s and other wide-bodied aircraft . . . In view of the position of Congress this year and in previous years, the committee expects the Air Force to proceed immediately with the procurement of wide-bodied cargo aircraft and to abandon the CX program as a substitute."

To McDonnell Douglas, this read like an attempt to overturn Air Force selection of the C17 and pave the way for the Lockheed C5. McDonnell Douglas prevailed upon Eagleton to press the Senate Appropriations Committee to write its Pentagon money bill so as to leave competition open to the C17 as well as existing cargo giants.

This assures a showdown on CX in the House-Senate conference to work out a compromise defense money bill for fiscal 1982.

That is not to say the Senate committee is any more enthusiastic than its House counterpart about spending \$12.9 billion to build a new cargo plane. "Significant questions remain" about the best way to meet military airlift requirements, the committee said in denying the Air Force's request for a \$169.7 million downpayment on the CX and settling for \$15 million for more studies.

The case of the CX indicates that picking tomorrow's weapons is a political process like almost everything else in Washington, the wonders of technology notwithstanding.