

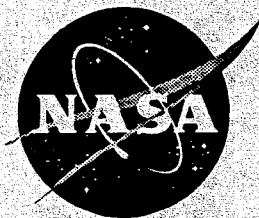
JS-96-006

**AUDIT
REPORT**

**SPACE STATION
FACILITIES REQUIREMENTS**

JOHNSON SPACE CENTER

September 26, 1996



**National Aeronautics and
Space Administration**

OFFICE OF INSPECTOR GENERAL

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National Aeronautics and
Space Administration

Headquarters
Washington, DC 20546-0001



Reply to Attn of: W

September 26, 1996

TO: Johnson Space Center
ATTN: AA/Director

FROM: W/Assistant Inspector General for Auditing

SUBJECT: Final Audit Report
Space Station Facilities Requirements
Assignment No. A-JS-95-002
Report Number JS-96-006

The NASA Office of Inspector General has completed an audit of the Space Station facilities requirements. The overall audit objective was to determine if the Space Station Program is being charged reasonable costs for McDonnell Douglas Aerospace (MDA) - Space Station Division (SSD) office space in Tower II. We found that SSD personnel in Tower II average 642 square feet per person, approximately 500 square feet more per person than the Johnson Space Center goal for personnel in Center buildings. As a result, the Space Station Program is being charged \$2.9 million annually for idle capacity in Tower II.

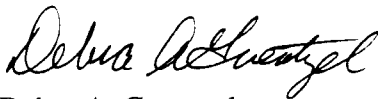
A written response to the recommendations was received on June 17, 1996. A clarification of issues regarding management's response to recommendation 2 was received on July 23, 1996. These responses are summarized in the recommendations section of this report and are included in their entirety as Appendix 1 and Appendix 2, respectively.

Management concurred with the report's first recommendation that the Contracting Officer direct the prime contractor to ensure future MDA facility cost charges are reasonable. The action taken by the Space Station Program Office in its June 11, 1996 letter to Boeing Defense and Space Group (enclosure 3 of Appendix 1) is responsive to our concern. We will review the contractor's justification of facility costs and, therefore, request to be included in the concurrence cycle for closure of this recommendation.

Management concurred with the intent of the second recommendation that the Contracting Officer should recover excessive contractor billings for unreasonable facility costs. However, they determined the facility costs are allowable and the Government does not have a legal basis to recover the monies. We have reviewed the information related to recommendation 2 and management's response to the recommendation. Based on our review, we agree that NASA would

not prevail in an attempt to recover the excessive contractor billings because of NASA's expressed interest in Tower II, as identified in the chronology (enclosure 1 of Appendix 1), and the JSC legal opinion of allowability of the costs (enclosure 3 of Appendix 1). As a result, we consider this recommendation closed.

If you have any questions or need additional information, please call Janice Goodnight at extension 34773; or Robert Wesolowski, Director, Audit Division-A, or me at (202) 358-1232.



Debra A. Guentzel

Enclosure

cc:

HQs -M/W. Trafton

JMC/P. Chait

JSC - BU/P. Ritterhouse

OA/R. Brinkley

W. Bates

OG/D. Tam

SPACE STATION FACILITIES REQUIREMENTS

Johnson Space Center
Houston, Texas

INTRODUCTION

In July 1993, the National Aeronautics and Space Administration (NASA) was directed by Congress and the President to "re-invent" the Space Station Freedom Program. In August 1993, the Johnson Space Center (JSC) was named host Center for the new International Space Station (ISS) Program. As the host Center, JSC would provide support to the ISS Program with both personnel and facilities to meet program requirements.

Boeing Defense and Space Group was selected as ISS prime contractor in February 1994 because of its role as provider of the essential Space Station elements necessary to sustain human life. The other Space Station Freedom prime contractors, McDonnell Douglas Corporation (MDC) and Rocketdyne Division, Rockwell International, agreed to become novated subcontractors to Boeing.

Prior to the reinvention of the Space Station Program and the selection of Boeing as prime contractor, MDC built a six-story office building in support of the program. The 178,300 square foot building, referred to as Tower II, can accommodate between 700 and 800 employees. After the Space Station Freedom Program termination, Tower II occupancy decreased significantly. Currently, McDonnell Douglas Aerospace (MDA) has approximately 350 employees occupying office space in Tower II, 234 of which are assigned to the Space Station Division (SSD). The remaining 116 employees are assigned to the Houston Division. The SSD is assessed for approximately 150,000 square feet of office space and 84 percent of the total facility cost.

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OBJECTIVES, SCOPE, AND METHODOLOGY

OBJECTIVES

Initially, the overall objective of the audit was to assess the need for additional office space for employees assigned to the Space Station Program. Specifically, we were to determine:

- the cost impact of moving Space Station personnel into Tower II;
- the number of people JSC is obligated to provide office space for; and
- the options available to the Space Station Program for providing facilities office space.

Shortly after audit field work began, JSC proposed, and the Space Station Program Office accepted, an additional 20,000 square feet of on-site office space, which would accommodate approximately 200 additional Space Station personnel. Based on these developments, the remaining audit field work focused on the costs associated with McDonnell Douglas Tower II. The revised audit objective was to determine:

- if the Space Station Program is being charged reasonable costs for SSD space in Tower II.

SCOPE AND METHODOLOGY

The audit scope was limited to McDonnell Douglas' Tower II facility costs. MDA utilizes Tower II, for the most part, in support of ISS work.

The audit included: (1) discussions with various JSC personnel including the Acting Manager, Space Station Procurement Office, and the Space Station Contracting Officer; (2) discussions with the MDA Principal Contracts Administrator and a Senior Financial Analyst; (3) two walk-throughs of the Tower II facilities; and (4) review of JSC and MDA records and related internal controls.

MANAGEMENT CONTROLS REVIEWED

We reviewed the current MDA procedures for office space allocation and budget forecasting. The allocation method determines the amount of square footage each tenant is assessed. Budget forecasting provides costing information associated with the square footage allocation.

AUDIT FIELD WORK

Audit field work was conducted from May 1995 through September 1995. The audit was performed in accordance with generally accepted government auditing standards.

OBSERVATIONS AND RECOMMENDATIONS

OVERALL EVALUATION

MDA-SSD personnel in the Tower II office building average 642 square feet per person, approximately 500 square feet more per person than maintained by the JSC Center Operations Directorate (COD). Although JSC has established a goal of 143 square feet per person for personnel in Center buildings, the Federal Acquisition Regulation (FAR) establishes the criteria for reasonableness and idle capacity. The Space Station Program is being charged an unreasonable amount for office space because MDA management decided to charge for idle capacity. As a result, the Space Station Program is being charged \$2.9 million annually for the idle capacity in Tower II.

JMI 1540.1H, FACILITY SPACE ALLOCATION AND UTILIZATION

JSC has established a goal of 143 square feet per person for personnel in Center buildings. According to JMI 1540.1H, Facility Space Allocation and Utilization, "JSC's goal for proper space utilization is to maintain an approximate average of 110 square feet (10.21 square meters) per person." JSC's general policy is to add an additional 30 percent, or 33 square feet, to the 110 square footage goal to account for common areas, bringing the total average to 143 square feet per person. The purpose of the JMI, dated May 9, 1995, is to ensure optimum utilization of facility floor space by establishing general policies, procedures, and standards for the allocation and use of facility space for offices, conference rooms, storage areas, and technical areas. The instruction applies to all NASA organizational elements, support contractors, and other Government agencies occupying facilities under the jurisdiction of JSC in the Houston area. Although JMI 1540.1H does not apply directly to facilities provided by JSC contractors, this guidance can be used to determine the reasonableness of facilities costs charged to NASA by its contractors.

FAR 31.201-3, DETERMINING REASONABLENESS

Costs are determined to be reasonable if, in nature and amount, they do not exceed that which would be incurred by a prudent person in the conduct of competitive business. According to FAR 31.201-3(b), Determining Reasonableness:

"What is reasonable depends upon a variety of considerations and circumstances, including- (1) whether it is the type of cost generally recognized as ordinary and necessary for the conduct of the contractor's business or contract performance; (2) general accepted sound business practices, arm's-length bargaining, and Federal and State laws and regulations;

*(3) the contractor's responsibilities to the Government, other customers, the owners of the business, and the public at large; and
(4) any significant deviations from the contractor's established practices."*

***FAR 31.205-17, IDLE
FACILITIES AND IDLE
CAPACITY COSTS***

Idle capacity is the difference between that which a facility could achieve under 100 percent operating time on a one-shift basis less normal delays, and the extent to which the facility was actually used to meet demands during the period. According to FAR 31.205-17(c), Idle Facilities and Idle Capacity Costs:

"Costs of idle capacity are costs of doing business and are a factor of normal fluctuations of usage or overhead rates from period to period. Such costs are allowable provided the capacity is necessary or was originally reasonable and is not subject to reduction or elimination by subletting, renting, or sale, in accordance with sound business, economics, or security practices."

***TOWER II AVERAGES
642 SQ. FT. PER
PERSON***

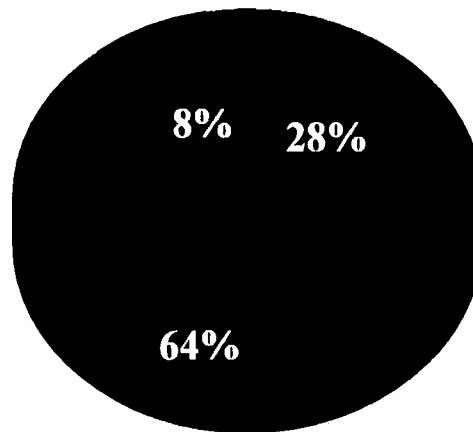
MDA personnel in the Tower II office building average 642 square feet per person, approximately 500 square feet more per person than maintained by the JSC COD. As of August 30, 1995, there were 234 MDA - SSD personnel occupying 150,214 square feet in the Tower II office building, averaging 642 square feet per person. By comparison, 7,469 civil service and contractor personnel occupy 895,334 square feet of on-site office space, resulting in an average of 120 square feet per person.

Tower II has a total of 178,262 square feet which is divided into three categories: (1) Space Station Division Dedicated; (2) Houston Division Dedicated; and (3) Non-Dedicated. As the following graph presents, the Space Station Division has 50,248 of 178,262, or 28 percent, dedicated square feet and the Houston Division has 13,884 of 178,262, or 8 percent, dedicated square feet. The remaining 114,130 square feet, 64 percent, is non-dedicated.

TOWER II
SQUARE FOOTAGE ALLOCATION

Legend

- Space Station Division Dedicated
- Houston Division Dedicated
- Non-Dedicated



***MCDONNELL DOUGLAS
OCCUPANCY POOL***

McDonnell Douglas forecasts its budget on a calendar year basis. The 1995 occupancy pool dollar amounts, as of August 30, 1995, are presented in the following table:

Total Occupancy Pool	Total Dollars
Space Station Division Dedicated	\$2.4 million
+ Houston Division Dedicated	\$.4 million
+ Non-Dedicated	\$2.8 million
= Total Pool	<u>\$5.6 million</u>
Total Pool less Non-Dedicated	\$2.8 million

Of the \$5.6 million total pool amount, \$4.4 million are associated with office space costs as presented in the following table:

Type of Office Space	Total Dollars
Space Station Division Dedicated	\$1.2 million
+ Houston Division Dedicated	\$.4 million
+ Non-Dedicated	\$2.8 million
= Total Office Space Costs	<u>\$4.4 million</u>

The total dollar amount of each type of office space is obtained by multiplying the type of square feet by the cost per square foot. The \$24.76 cost per square foot is obtained by dividing the 178,262 total square feet by the \$4.4 million total office space cost.

For purposes of the audit, we dealt only with Tower II square footage and related office space costs.

McDonnell Douglas assesses the SSD for the total cost of dedicated square feet plus a percentage of non-dedicated square feet based on a percent of the occupancy pool. The occupancy pool allocation percentage is calculated in the following table:

Occupancy Pool	Total
Space Station Division Dedicated	\$2,425,123
(divided by) Total Pool less Non-dedicated	\$2,768,858
Occupancy Pool Allocation Percentage	88%

Therefore, the current SSD percent of the non-dedicated square footage is 88 percent of 114,130, or 99,966 square feet.

***MDA CHARGING
FOR IDLE CAPACITY***

MDA management made a decision to charge the Space Station Program for idle capacity. According to FAR 31.205-17, Idle Facilities and Idle Capacity Costs, costs of idle capacity are allowable unless the capacity is subject to subletting or renting. As part of the Space Station Freedom Work Package II termination, NASA paid for one year of lease costs to McDonnell Douglas in accordance with FAR 49. Since the period for the termination costs ended in February 1995, McDonnell Douglas has made little attempt

to lease office space in Tower II because they have been able to pass the office space costs to NASA under the current Space Station agreement. As a result, the Space Station Program is currently assessed with an unreasonable amount of idle capacity and the associated costs.

McDonnell Douglas allocates costs for the dedicated and non-dedicated office space to the SSD as follows:

Type of Sq. Ft.	Dedicated	Non-Dedicated	Total
Amount of Sq. Ft.	50,248	99,966	150,214
x Cost Per Sq. Ft.	\$24.76	\$24.76	\$24.76
= Total Cost Per Type of Sq. Ft.	\$1.2 million	\$2.5 million	\$3.7 million

As a result, SSD is assessed and the Space Station Program Office is charged for 84 percent of the total square footage and total office space costs as calculated below:

- 150,214 SSD square feet divided by 178,262 total square feet equals 84 percent of the total square footage.
- \$3.7 million SSD office space costs divided by \$4.4 million total office space costs equals 84 percent of the total office space costs.

***IDLE CAPACITY
COSTING \$2.9M
ANNUALLY***

The Space Station Program is being charged unreasonable facility costs of \$2.9 million annually for the idle capacity in Tower II as shown in the following table:

	JSC Standard	Current Tower II
Square Feet Per Person	143	642
x Number of People	234	234
x Cost per Square Foot	\$24.76	\$24.76
= Total Office Space Costs	\$.8 million	\$3.7 million

As of September 30, 1995, we estimate MDA charged \$2.16 million for unreasonable facility costs, calculated as follows:

- \$3.7 million SSD office space costs divided by 12 months equals \$308,334 per month times 7 months billed to the Government (March 1995 through September 1995) equals \$2.16 million in estimated unreasonable costs.

If this continues through mid-2003, the life of the Space Station contract, the estimated cost of idle space to NASA would be approximately \$20 million, calculated as follows:

- \$2.9 million annual charges in idle capacity times 7 years remaining on the Space Station contract equals \$20 million in estimated idle facility costs.

RECOMMENDATION 1

The Contracting Officer should direct the prime contractor to ensure future MDA facility costs charges are reasonable.

Management's Response

The prime contractor (Boeing Defense and Space Group) has been notified that the costs associated with the unused portion of Tower II (idle capacity costs) have been determined by the Government to be allowable for the period of March 1, 1995 to the present. The prime contractor was further notified that these costs will continue to be allowable only for a reasonable period, and that this must be coupled with a demonstration of diligent efforts to mitigate such costs. Finally, the prime contractor has been asked to justify the reasonableness of costs associated with the portions of the building being utilized in the performance of the subject contract.

Evaluation of Management's Response

The action taken by the Space Station Program Office in its June 11, 1996 letter to Boeing Defense and Space Group (enclosure 3 of Appendix 1) is responsive to our concern. We will review the contractor's justification of facility costs and, therefore, request to be included in the concurrence cycle for closure of this recommendation.

RECOMMENDATION 2

The Contracting Officer should recover excessive contractor billings for unreasonable facility costs.

Management's Response

The questioned costs occurred during the second year of the contract period of performance under NAS15-10000. MDA documentation indicated that during this time, it actively sought lease agreements from a variety of businesses and Government

agencies which would mitigate the Tower II idle capacity costs. As a result, there are now four new tenants currently occupying space in the Tower II facility. In accordance with FAR Part 31.205-17(b)(2), the Government has determined that MDA's efforts at mitigation were reasonable and, therefore, the questioned costs are allowable. Thus, the Government does not have a legal basis to recover the \$2.9 million as recommended in the draft report.

***Evaluation of
Management's
Response***

After reviewing management's initial response to recommendation 2, we could not determine whether management concurred or nonconcurred with the recommendation. As a result, we asked management to clarify its response to the recommendation.

***Clarification of
Management's
Response***

We concur with the intent of the recommendation, but an extensive review has determined that the facility costs are allowable; thus, the Government does not have a legal basis to recover the monies. In a letter dated June 6, 1996, the JSC Legal Office stated that, while idle costs only are allowable for a reasonable period of time, the one year period specified is simply a reasonableness "benchmark." The contractor can establish a reasonable period for the allowability of facilities costs beyond a year by demonstrating diligent and reasonable efforts with respect to their initiatives to get rid of the facility.

***Evaluation of
Management's
Response***

We have reviewed the information related to recommendation 2 and management's response to the recommendation. Based on our review, we agree that NASA would not prevail in an attempt to recover the excessive contractor billings because of NASA's expressed interest in Tower II, as identified in the chronology, and the JSC legal opinion of allowability of the costs. As a result, we consider this recommendation closed.

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MAJOR CONTRIBUTORS TO THIS AUDIT

Johnson Space Center

Janice Goodnight, Program Director, Human Exploration and
Development in Space

Brenda Conley, Auditor-in-Charge

June Glisan, Audit Program Assistant

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
2101 NASA Road 1
Houston, Texas 77058-3696



JUN 17 1996

Reply to Attn of OG3-96-124

TO: W-JS/OIG Audit Field Office Manager

FROM: OAManager, Space Station Program

SUBJECT: Discussion Draft Report, Space Station Facilities Requirements,
Assignment No. A-JS-95-002

The following responses to the recommendations in the subject draft report are submitted for your consideration in developing a final report for the subject audit. We have concluded that the costs associated with the unused portion of Tower II (idle capacity costs) are allowable based on our examination of the facts, including additional relevant information contained in a letter submitted by the prime contractor from McDonnell Douglas Aerospace (MDA), dated March 4, 1996 (see Enclosure 1), and based on advice from the JSC Legal Office confirming our conclusions (see Enclosure 2).

RECOMMENDATION 1: The Contracting Officer should direct the prime contractor to ensure future MDA facility cost charges are reasonable.

RESPONSE TO RECOMMENDATION 1: The prime contractor (Boeing Defense and Space Group) has been notified that the costs associated with the unused portion of Tower II (idle capacity costs) have been determined by the Government to be allowable for the period of March 1, 1995, to the present. The prime contractor was further notified that these costs will continue to be allowable only for a reasonable period, and that this must be coupled with a demonstration of diligent efforts to mitigate such costs. Finally, the prime contractor has been asked to justify the reasonableness of costs associated with the portions of the building being utilized in the performance of the subject contract (see Enclosure 3).

RECOMMENDATION 2: The Contracting Officer should recover excessive contractor billings for unreasonable facility costs.

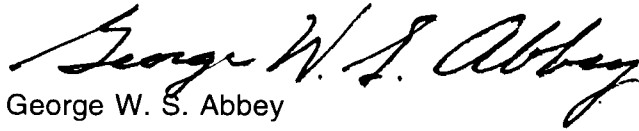
RESPONSE TO RECOMMENDATION 2: The questioned costs occurred during the second year of the contract period of performance under NAS15-10000. MDA documentation indicates that during this time it actively sought lease agreements from a variety of businesses and Government agencies, which would mitigate the Tower II idle capacity costs. As a result, there are four new tenants currently occupying space in the Tower II facility. In accordance with FAR Part 31.205-17(b)(2), the Government has determined that MDA's efforts at mitigation were reasonable and, therefore, the questioned costs are allowable. Thus, the Government does not have a legal basis to recover the \$2.9 million as recommended in the draft report.

My point of contact regarding this matter is Marianne Bachstein at extension 36527.



Randy H. Brinkley

Concurred by:



George W. S. Abbey

3 Enclosures

cc:

OA/A. M. Allen

HQ/M/W. C. Trafton

HQ/ML/G. W. McClain

March 4, 1996
2-1150-96-0118

National Aeronautics & Space Administration
Lyndon B. Johnson Space Center
Houston, Texas 77058



Attention: Wayne Buckley, Contracting Officer

Subject: Contract NAS15-10000, Facility Costs for Tower II, Boeing
Subcontract HX3200, International Space Station

- Reference: (a) NASA Letter JSC, OG3-96-089 dated February 23, 1996;
Subject: Office of Inspector General (OIG) Discussion
Draft Audit Report No. A-JS-95-002, Space Station
Facilities Requirements
- (b) McDonnell Douglas Letter A96-J132-JAS-96-172 dated
March 4 1996; Subject as above (Copy enclosed)

Transmitted herewith is the initial response to reference (a) draft audit report regarding "Space Station Facilities Requirements at Johnson Space Center". Given the short response time afforded the contractor team to review and respond to this draft report, we are continuing to evaluate the report and will augment this submittal as required.

Further, based on the fact that McDonnell Douglas disagrees with the draft audit's findings and conclusions, Boeing concludes it is premature to take final Contracting Officer action until all pertinent facts are obtained and evaluated, and the parties have entered into appropriate discussions.

Questions concerning this correspondence may be directed to the undersigned at 283-4119.

Judith H. Love
Contracts Manager, Vehicle AIT

cc: Lucy Yates, OG3
James A. Spencer, McDonnell Douglas Aerospace

ENCL 1

McDonnell Douglas Aerospace
Space and Defense Systems

4 March 1996
A96-J132-JAS-96-172

D. Todd Standlee/HF-96
The Boeing Company
P. O. Box 58747
1045 Gemini
Houston, Texas 77258-8747

Subject: FACILITY COSTS FOR TOWER II BOEING SUBCONTRACT HX3200
(MEMBER HX3221) - ISS PROGRAM

Reference: Boeing Letter 2-4400-DTS96-118 dated 26 February 1996

1. Background

The reference letter of 23 February 1996 transmits the subject "discussion draft audit report" by the NASA/OIG. The IG states that the NASA Space Station Program (SSP) has been charged \$2.9 million of unreasonable facility costs for the McDonnell Douglas [Realty Company] (MDRC) Tower II for the period of 1 March 1995 to the present. The IG explains (p.2) that when its audit began in May 1995, the objective of the audit was to assess the need for additional office space for NASA Space Station Program (SSP) personnel, including assessing the cost of moving those personnel into Tower II. This coincided with MDA's understanding in light of our extensive efforts to help NASA plan for such a move. However, shortly after audit field work began, the IG cites the action of Johnson Space Center (JSC) in "propos[ing]" JSC office space for SSP personnel as the development which totally changed the focus of the audit to one of challenging the costs being charged by MDA for the very building NASA wanted to move into.

Unfortunately, the IG never communicated its new focus to MDA. Therefore, MDA had no opportunity to provide NASA the information it would need to make an accurate appraisal of the reasonableness of Tower II costs. As a result, both the findings and the conclusions of the discussion draft audit report are incorrect. As explained in this response, the OIG draft discussion audit report does not provide NASA with any reasonable justification for issuing a debit voucher for any portion of the facility costs discussed in the report.

The following represents our best efforts to describe some of the major events relevant to NASA making a fair evaluation of Tower II costs. In view of the unreasonably short response time imposed by NASA, it is by no means exhaustive. In sum, however, we disagree with the draft audit's findings and conclusions. In addition, we strongly disagree with NASA's proposed action of proceeding directly from a "discussion draft OIG audit report" to issuance of a "debit voucher." Such a precipitous course of action would be inconsistent with FAR 42.801 and NASA FAR Supp. 18-42.801. No cost disallowance or contractual action would be appropriate until the parties have gathered and examined all of the pertinent facts and conducted full and meaningful discussions.

Please provide this information to NASA. However, considering that the OIG took four months to conduct its audit, and five more months to issue a "discussion draft audit report", and yet NASA is only willing to give MDA one week to respond, we reserve the right to supplement this response once we have assembled further data.

2. Tower II Idle Capacity Costs Are Allowable Under FAR Cost Principles

Fundamentally, we disagree with the draft audit's premise that the "idle capacity" costs are unreasonable and may not currently be recovered under our ISS subcontract. The FAR provides that idle capacity costs are costs of doing business and are normally allowable if the capacity is necessary or was originally reasonable, FAR 31.205-17(c). As NASA is well aware, Tower II was designed and constructed specifically for use in support of our Space Station Freedom (SSF) contract. However, the NASA IG failed to take into account the history before 1 March 1995 which would reveal NASA's role in causing Tower II occupancy to decline to what it was as of 1 March 1995. See attached chronology. The historical facts and circumstances related to the SSF termination, together with relevant legal authorities supporting a termination recovery, were set forth by us to NASA several times in 1994 -- for instance, in our 18 July 1994 "Revised Proposal for the Lost Value of Clear Lake Facilities As A Result Of Actions On Contract NAS 9-18200."

Under those facts and circumstances, the one-year limitation referenced in the draft audit report (at 6) for recovery of termination costs is unreasonable and inconsistent with the pertinent FAR cost principles and case law. If the "one-year" reference is to FAR Part 49 itself, it is unclear what is intended or how it could be relevant; in the alternative, if the reference is to FAR § 31.205-17(b), it is inapplicable here. In any event, [three] years or more would be fully reasonable and consistent with the cost principles and case law. This is especially so in view of NASA's actions not only in terminating SSF, but in orchestrating MDA's move of 98 personnel from Tower II in December 1994 to the Clear Lake Development Facility (CLDF). It is ironic that NASA now wants to disallow Tower II costs beginning only three months after MDA made that move at NASA's request.

3. MDA Has Documented Continuous, Extensive Efforts to Mitigate Costs Associated with Tower II

The heart of our disagreement with the IG is its apparent reliance on the limited exception to the allowability of "idle capacity" costs -- that is, idle capacity that is "subject to reduction or elimination by subletting, renting, or sale, in accordance with sound business, economics, or security practices." FAR § 31.205-17(c). The NASA IG draft audit report states at (6-7):

Since the period for the termination costs ended in February 1995, McDonnell Douglas has made little attempt to lease office space in Tower II because they have been able to pass the office space costs to NASA under the current Space Station agreement.

Attachment 1 to this letter decisively refutes this IG finding. That detailed chronology lists some of the exhaustive efforts of MDA to fill the space in Tower II, including

documented efforts of MDA during much of 1995 to respond to NASA's numerous requests pursuant to its efforts to occupy large portions of Tower II. Contrary to the unsupported finding in the draft audit report (at 6-7), McDonnell Douglas has in fact made all reasonable efforts to lease out or occupy the underutilized space in Tower II. As you are aware, during 1995-96 many of those efforts have been with NASA and/or Boeing. Had the OIG auditors sought such historical information from us during their audit, we would have been pleased to provide it.

4. MDA Trusts NASA Will Deal with Us in Good Faith

In retrospect, MDA is alarmed by the coincidence of (i) the draft audit report's reference (at 2) to a mid-1995 redirection of focus away from NASA obtaining Tower II office space toward an audit challenging the allowability of MDA's costs for Tower II, and (ii) the IG's representation to MDA on 27 June 1995 that NASA is "positioning to buy the building." In all of our post-termination efforts with respect to Tower II, we have, of course, taken NASA's expressions of interest in occupying Tower II as a tenant as genuine and substantial. Indeed, we welcome the continuation of such discussions with NASA and urge their prompt resumption. We are also receptive to any other advice NASA might offer as to how McDonnell Douglas might best mitigate its losses with respect to Tower II, through leasing or otherwise.

5. ADDITIONAL COMMENTS ON THE REPORT

a. **Objectives, page 2** - The original IG audit was to determine space available for NASA, including the costs associated with moving into Tower II, but was turned into a cost audit after JSC "proposed" additional on-site office space. If NASA had already found the space on site at JSC, we do not understand why discussions with Boeing, in response to NASA recommendations, were allowed to continue during the June, July time period that the IG identifies as when its audit field work was being conducted? An MOA with Boeing was submitted to Boeing on 30 June 1995. Boeing's position, at that time, was any move to Tower II would be temporary because it was planning to lease another facility, which indicates the additional JSC space of 20,000 square feet is still not adequate.

b. **McDonnell Douglas Occupancy Pool, page 6** - At the top of page 6, the table addresses just the cost of office space, Tower II. It appropriately removes from the \$5.6M associated with one month (January, 1995) of CLDF, the taxes from Tower 1, and the warehouse, a total of \$1.2M resulting in a cost of \$4.4M. However, in the third paragraph, the IG states, "For purposes of the audit, we dealt only with Tower II square footage and related office space costs." Then in the table that follows, it computes an occupancy percentage of 88% which is the weighted average that MDA develops based on office, manufacturing, and warehouse. So the report does not solely address office space, because by using the weighted average, it is including the manufacturing and warehouse space.

c. **Idle Capacity Costing \$2.9M Annually, page 7** - This table is incorrect. The claim that the "Space Station Program is being charged unreasonable facility costs" is in error. The costs are reasonable. In addition, had NASA followed through on its originally expressed intent to have major portions of Tower II occupied

by Boeing and NASA, the unoccupied space would have been greatly reduced. Also, because NASA kept us in discussions while we were attempting to meet its expressed needs for space, the unoccupied space remained on hold as we developed floor plans for NASA occupancy. Our attempts to mitigate the costs to the Space Station program were hampered by NASA's indecisiveness. After MDA was finally free to actively seek tenants, we have made a tremendous improvement in cost reduction to the contract.

6. Conclusions

In summary, NASA's intent to issue a debit voucher for \$2.9 million is unjustified for several reasons.

a. Tower II capacity was originally necessary for MDA's performance of its Space Station Freedom contract. Part of that capacity became idle due to actions by NASA. MDA made several efforts to mitigate costs of Tower II prior to 1 March 1995. As a result, Tower II idle capacity costs are allowable under FAR 31.205-17(c).

b. There is no applicable one year limitation on the idle capacity costs. See paragraph 2 above.

c. The IG's statement (at 6-7) that MDA "has made little attempt to lease office space in Tower II" is refuted by the facts. MDA has documented continuous efforts to fill Tower II throughout all of 1995 and 1996. (See Attachment 1). Therefore, the IG has established no exception to the normal FAR cost principle that idle capacity costs are allowable, FAR 31.205-17(c).

d. We have been continuously responsive to NASA requests to occupy Tower II with NASA or Boeing people. NASA's vacillation contributed to the delay in fully occupying the building. Once released from NASA's "right of first refusal" on the building, MDA has promptly eliminated the idle capacity.

e. One of many ironies of NASA's threatened disallowance of Tower II costs, is that MDA has gladly allowed NASA and its other contractors to frequently use (extensively documented) those portions of Tower II (such as conference rooms), the costs of which NASA now wants to disallow. Therefore, NASA is hardly in a position to characterize that space as idle capacity.

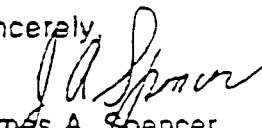
f. We moved in December 1994, per NASA's request, approximately 100 MDA and subcontractors from Tower II to the SCTF, thus compounding the idle capacity in Tower II. This occurred less than three months before the time that NASA proposes to disallow the costs for the very space which MDA vacated at NASA's request.

g. NASA proposes using Government office space utilization standards developed for Government agencies as the basis for disallowing costs of Contractor facilities. There is no justification in the subcontract, the FAR cost principles, or case law to disallow contractor facility costs on that basis.

h. Even if the Government's standards for its own use of facilities applied to contractors, the NASA IG failed to follow the FPMR in its Tower II space utilization analysis. (See Attachment 2).

i. NASA has an obligation of good faith and fair dealing in its administration of its contracts. One of those obligations is to "make every reasonable effort to reach a satisfactory settlement through discussions with the contractor" before issuing a notice of intent to disallow costs. FAR 42.801(a).

Sincerely,



James A. Spencer
Contract Manager
Space Station

JAS/dlb

Attachments: 1. Tower II Chronology
2. FPMR Analysis

TOWER II CHRONOLOGY

23 December 1987 MDA awarded contract NAS 9-18200 for Space Station Freedom (SSF) (Work Package 2)

February 1993 Tower II construction completed by MDC Realty Co. at cost of \$15.3 million plus \$2.7 million leasehold improvements. MDA entered into a capital lease with MDC Realty Co. Lease and operating costs charged to SSF contract.

October 1993 MDA received notice from NASA that it intended to terminate SSF for convenience.

16 December 1993 MDA submitted a termination settlement proposal to NASA summarizing its entitlement to compensation for the lost value of the Clear Lake Development Center (CLDC) seeking \$40.6 million, including \$14.6 million for Tower II.

January 1994 MDA listed the CLDC properties with a broker.

1 February 1994 Novation of NAS 9-18200 transferring portion of work to subcontract with Boeing. Agreement that MDA entitled to an equitable adjustment under NAS 9-18200 as if work which was deleted has been terminated for convenience under the Termination clause. Also agreement that ongoing work on the Space Station Program (International Space Station Alpha - ISSA) will be chargeable to MDA's subcontract HX3221 with Boeing.

September 1994 180 employees from Tower I moved to Tower II.

December 1994 NASA expresses an interest in adding part of Tower II to the sale/lease contract for CLDF.

December 1994 At NASA's request, MDA moved 98 employees from Tower II to CLDF.

January 1995 Worked with SpaceHab to lease a large office area. They signed for office space on level 2.

20 January 1995 NASA awards MDA contract NAS 9-19350A for the lease/option to purchase the CLDF (Neutral Buoyancy Laboratory). MDA releases NASA from all claims for any undepreciated costs or lost value of these facilities (CLDF) only as a result of NASA's termination of the SSF contract, and the agreement expressly excludes from the release any other MDA claims relating to the SSF termination. At conclusion of that negotiation, NASA contracting officer expresses interest in purchasing Tower II for \$5 million.

31 January 1995 MDA met with a Commercial Property Broker.

3 February 1995 Showed the Tower II space to Dorothy Rasco, JSC Facilities. NASA interested in 1 1/2 floors of space.

20 February 1995 Showed the space to NASA Space Station Proj. Off representative.

27 February 1995 A group of NASA space planners visited Tower II. They said the ISS program office will not move because of the lack of hard walled offices.

9 March 1995 A NASA representative called regarding Tower II space. He asked if NASA could use all of level 3, front half of level 6 and 1/3 to 1/2 of level 5, plus a large conference room. Told him yes.

10 March 1995 MDA proposed a move-in plan to fit the 9 March request. Layout was given to NASA.

4 April 1995 An MOA was drafted, based on the MOA used to move Boeing into the CLDF.

11 April 1995 The first draft of a MOA for NASA use of Tower II was hand delivered to NASA PCO.

25 April 1995 NASA representative contacts MDA to report on a high level NASA meeting planned to reach a conclusion on moving people into Tower II. NASA asks for assurance that we are holding the space for him. He said he would call back on 26 April.

May 1995 NASA OIG begins an audit to assess the need for additional office space for employees assigned to the Space Station Program (SSP), including the cost of moving additional SSP personnel into Tower II. Shortly thereafter, JSC proposed an additional 20,000 square feet of on-site office space. The audit objective was revised to determine if the SSP is being charged reasonable costs for SSD space in Tower II.

10 May 1995 Meeting between MDA and Boeing regarding possible Boeing interest in occupying Tower II space. Boeing is interested only in short term space.

11 May 1995 Revised the draft NASA/MDA MOA to tailor it for Boeing, rather than NASA.

12 May 1995 Completed a rearrangement plan for Tower II that would make space available for Boeing.

15 May 1995 Received message that NASA wants to move 200 people to Tower II immediately and wants a plan for doing it.

24 May 1995 Boeing comments on the draft MOA provided for incorporation.

25 May 1995 Incorporated the Boeing requested changes to the MOA.

17 June 1995 Revised the MOA again for Boeing.

22 June 1995 Revised the MOA again for Boeing.

30 June 1995 MDA formally submitted a finalized MOA to Boeing.

31 July 1995 Held meeting on leasing space to the FAA.

11 August 1995 FAA meeting on space in Tower II.

15 August 1995 FAA space costing exercise

31 August 1995 FAA people toured the building. Said they would make a selection by 3 October.

8 September 1995 Met with Stan Moorehead of MicroCraft on leasing space in Tower II.

14 September 1995 Showed the Tower II space to Nick Livanos, G. Collettis and Nick Fistes, executives for SeaChem, a shipping company.

15 September 1995 Stan Moorehead of MicroCraft signed a lease for space on lvl. 3

18 September 1995 MicroCraft moved into Tower II.

19 September 1995 FAA called and wants us to stay in the running. They are interested in our building space.

26 September 1995 Strategy meeting for cinching deal with FAA.

28 September 1995 Discussed FAA and SeaChem interest in Tower II with Mario Stavale and Phil Cyburt of MDRC.

20 October 1995 FAA meeting.

24 October 1995 John Duncan brought a contingent from the FAA to consider using MDA supplier furniture rather than buying new.

27 October 1995 FAA BAFO prepared.

3 November 1995 FAA BAFO final review.

16 November 1995 MDA talked to Lockheed about leasing them some space for the next two years for training Russian cosmonauts. It turned out that all they wanted was some training rooms which were not available in Tower II.

17 November 1995 MDA notified that SeaChem might be interested in space. I

17 November 1995 Nick Fistes of SeaChem returned for another look at the Tower II space. SeaChem ask MDA to meet with his team..

20 November 1995 We were notified by the FAA of our successful bid to lease space to them for their regional office.

5 December 1995 Met with SeaChem on defining their space requirements.

6 December 1995 Presented floor layout to SeaChem ..

14 December 1995 A sizable contingent from the FAA office came to see their future facility area and meet our facilities team.

15 December 1995 Seachem telecon. Agreed to meet early next week to arrive at a letter of commitment for Seachem to lease approx. 12,000 sq. ft.

15 December 1995 Assisted the NASA Space Station team in setting up their Christmas party in Tower II Room 1300, the cafeteria and the lobby area. NASA didn't have sufficient space on site for the party so we cooperated by letting use MDA facilities.

18 December 1995 Seachem negotiations for space continued in room 2206.

19 December 1995 An FAA group came for a tour of their future space in Tower II.

2 January 1996 Met with Seachem on lease space

3 January 1996 Reviewed need for Tower II space with Seachem. Worked on a Memo of Understanding which limits Seachem to seeking space only in Tower II.

4 January 1996 Memorandum of Understanding signed by Seachem.

10 January 1996 First of many meetings on building layout modifications for Seachem.

18 January 1996 Telephone call from Boeing, requesting space in Tower II. Suggested Boeing lease all of Level 4.

22 January 1996 Responded to NASA's request to identify the number of square feet we are leasing out in Tower II.

22 January 1996 Boeing called to have a boilerplate lease for space in Tower II sent to her. Sent it by FAX.

29 January 1996 Telecon from T. Hesse asking the value of Tower II. She said NASA could live with one floor of Tower II occupied by Seachem/FAA if they decided to buy the building. She said she knew Boeing was also talking to us about space in Tower II. We offered to get a selling price from MDRC.

29 January 1996 Telecon to MDRC requesting sale price for Tower II.

1 February 1996 T. Hesse called to see if MDRC had defined a price for Tower II yet.

2 February 1996 P. Tribble called to say she had the Boeing version of the lease in hand and would deliver it on Monday for our review.

6 February 1996 Call to Terrence Hesse to arrange for delivery of Tower II cost to her. She agreed to a meeting a 2 PM on 15 Feb.

6 February 1996 P. Tribble delivered two lease copies signed by Boeing.

9 February 1996 Seachem signed the lease for Tower II space.

12 February 1996 T. Hesse called to reverify the 15 Feb meeting on the cost of Tower II. A little later NASA called back and said the meeting was off because the new head of NASA Business Management Jane Stearns would call to reschedule it. MDA had the price available for the sale of the building but couldn't find anyone to present it to.

COMPARISON OF IG'S DISCUSSION DRAFT ANALYSIS WITH
GUIDANCE IN NASA PROVIDED FEDERAL PROPERTY
MANAGEMENT REGULATIONS

1. McDonnell Douglas takes exception to the methodology and calculations used by OIG to compute the amount of the allegedly "unreasonable facility costs" (\$2.9 million annually). There is nothing in the FAR cost principles or case law which limits MDA's recovery of facility capital lease costs or executory (occupancy) costs to either JSC's "goal" for office square feet per person, nor to any other standard NASA chooses to impose on itself. The NASA IG's use of the JSC "goal" as its basis for recommending that the NASA contracting officer disallow MDA facility costs related to Tower II is without basis in our subcontract or in the FAR. Therefore, MDA takes exception to the IG's use of a standard developed by JSC for its own utilization of office space as a basis to recommend disallowance of MDA costs. However, in applying the JSC "goal," the NASA IG failed to consider additional information which is necessary to conduct an analysis of MDA's utilization of Tower II office space, even following the Government's guidelines for Government agencies. This is apparent from a review of the GSA's Federal Property Management Regulations (FPMR). In August 1992, NASA provided MDA with an August 2, 1991 version of GSA's FPMR for our guidance in office planning, even though that regulation prescribes only "policies and procedures for the assignment and utilization of space in GSA controlled facilities." FPMR 1-1-17.000. There was no contract provision requiring MDA's compliance with GSA's "temporary regulation." However, I will use the guidance that NASA provided to point out the additional information that the NASA IG should have considered before issuing its draft report.

2. The NASA IG took a very simplistic approach of counting (somewhat inaccurately) the number of MDA personnel in Tower II which supported space station and multiplying that by the Johnson Space Center (JSC) "goal" of 143 square feet per person for personnel in Center buildings. Although conceding that "JMI 1540.1H does not apply directly to facilities provided by JSC contractors," the IG goes on to use that as the sole basis for calculating the reasonable square footage of Tower II costs that may be charged by MDA to its ISSA subcontract with Boeing. Even if the JSC standard applied to MDA, the word "goal" hardly denotes the imperative. But having chosen to hold MDA to a standard for the Government's own use of office space, the NASA IG made no effort to conduct a space utilization survey in compliance with the standards set forth in the Federal Property Management Regulations. Nor did it take into account the history before 1 Mar 95 which would explain NASA's role in causing Tower II occupancy to be what it was as of 1 Mar 95. Further, the IG failed to inquire of MDA's pre-1995 efforts to occupy or lease Tower II, or throughout 1995 and continuing to the present time, its vigorous efforts to fill space in Tower II with NASA personnel or to lease space to other parties. It was apparently unaware of MDA's efforts to fill Tower II and of MDA's cooperation with NASA's intentions to occupy portions of Tower II, even though the IG's initial assigned objective included determining the cost impact of moving NASA Space Station Program personnel into Tower II. However, MDA can now make

available to the IG its efforts in developing move-in plans, facility layouts, and MOAs for moving both NASA and Boeing personnel into Tower II at NASA's behest.

3. A critical error in the NASA IG's application of the JSC office space "goal" to Tower II, was its total disregard of space which is not "office space," but which is essential to MDA's proper utilization of the building in its performance of its ISSA subcontract. Such space would include mechanical, custodial, circulation, or toilet areas. Space in federal buildings is categorized based on its physical characteristics. Workspace includes not only office space, but storage space and special space. FPMR 101-17.102(mm). Office space means space which provides an acceptable environment suitable in its present state for an office operation. The GSA's definition for "Primary Office Area" is "the personnel-occupied area in which an activity's normal operational functions are performed." FPMR 101-17.102(t). 125 square feet represents the amount of space occupied by employees housed in GSA standard office space -- clerical, administrative, paraprofessional, professional, managerial, and executive -- using either conventional furniture or furniture systems. FPMR 101-17.200(b).

4. **"Office support area"** means those specific areas constructed as office space, but used to meet mission needs outside the requirements for housing personnel. It includes space for needs such as reception/waiting areas; conference rooms; file areas; central storage areas; processing areas; and library and reference areas. FPMR 101-17.102(q). "The 'office support area allowance' is the percentage of office space, over and above the primary office area requirement, allocated for office support functions." FPMR 101-17.102(r). "Support areas" are based on the GSA estimate of 22%. This is added to the 125 square feet resulting in a standard of 153 square feet per person in total. This number would correspond to the JSC "goal" of 143 square feet. **"Support space does not include space classified as storage or special in Appendix A of [the FPMR]."** FPMR 101-17.200(c). All occupied office space should be allocated its pro rata share of building support area, special, and storage space. However, the IG failed to take such space into account in its report. In addition, the FPMR points out that "[s]upport area requirements have the greatest variation among agencies since these requirements are primarily mission driven. [Therefore,] [s]upport space needs will be developed using professional methods and techniques." FPMR 101-17.200(c). Again, the IG failed to do any analysis of what the appropriate support areas would be for SSD's performance of its mission.

5. The "Primary Office Area Utilization Rate" is an indicator of the efficiency with which the primary office area is used. FPMR 101-17.1(u). It is calculated by dividing the total occupied "primary office area" square footage by the total number of people in that area. A method for calculating utilization rates focuses on the portion of the office assignment occupied by the personnel working in the space. The IG failed to do this. It made no effort to identify what portion of Tower II is primary office area. Instead, the IG simply multiplied the JSC "goal" times the number of SSD people, and then it left out all other steps required by the FPMR in identifying the appropriate additives for support space, special

space, storage space, and joint use (common) space. Such areas include the cafeteria, building lobby, main aisle ways, rest rooms, building core areas, etc., which are not included in the GSA Standard definition of Primary Office Areas, but are in addition to the GSA's standard of 153 square feet.

6. Contrasted to "office support area" is the "building support area", which consists of that portion of a floor area that is not occupiable by an occupant's personnel or furnishings. Therefore, it is neither office space nor office support area. It includes the building's operation and maintenance, mechanical, toilet, custodial, circulation, and their enclosing walls. FPMR 101-17.102(o)(3). There is no evidence that the IG took this space into account in its analysis.

7. Also excluded from office space is "storage space" which generally consists of "unfinished" floors, walls, ceilings containing minimal lighting and heating. FPMR 101-17.102(mm)(2). Such space includes supply rooms, storerooms, file rooms, and closets (not finished to office standards). The NASA IG appears to have ignored such space in its analysis.

8. Similarly excluded from office space is "special space" which has unique construction features and requires special equipment or varying sums to construct, maintain, and/or operate as compared to office and storage space. FPMR 101-17.102(mm)(3). Such space includes food service areas, such as cafeterias, mechanical vending areas, and private kitchens. It also includes structurally changed areas, such as auditoriums, automatic data processing areas, including computer rooms, and conference and training areas. This space often consists of joint use space which is common space available for use by all occupants of the building. FPMR 101-17.102(n). The NASA IG also ignored this type of space in its analysis.

9. MDA had provided the IG with a listing of 240 employees and subcontractors in Tower 2 working the ISS effort. It is unclear why the IG reduced this to 234. But these 240 people were identified as occupying 50,248 square feet. Further review of the 50,248 reveals that 5,263 square feet thereof is not space appropriately included in to the GSA Standard for "primary office area." The portion that should be excluded consists of 3825 square feet for MDA's large computer center, 250 square feet for the Facility Controls Console Room, and 688 square feet for laboratory space.

10. In addition the report has not recognized the program's need for a facility which includes a large reproduction facility, large computer rooms, cafeterias, and larger and more numerous conference rooms than are included in the "primary office area" calculation. These areas should be considered as allowable independent of, and in addition to, the square feet per person calculation. NASA should be especially aware of this in view of the frequent (well documented) use of Tower II's conference rooms by NASA and its other contractors, often displacing MDA's need for those rooms.

ANALYSIS OF THE DATA PROVIDED IN THE DISCUSSION DRAFT AUDIT REPORT

Total square feet 178,262

Divided as follows:

ISS dedicated	50,248	(should exclude the 5,263 from above)
HD dedicated	12,507	
TENANT	1,092	
Common area	70,547	(see below for the breakout)
Unoccupied	44,093	(Due to several leases for Tower II space, this figure has been greatly reduced)

Joint use or common area space was classified throughout the report as non-dedicated along with the unoccupied. Common areas should be treated separately because they always be shared based on the total occupied space. The "unoccupied" square footage will decrease as it is occupied, but the joint use (common) area total amount will remain the same.

The 70,547 square feet of common area space (including special and storage) includes:

Lobby Reception	4,162
Cafeteria/Floor Kitchens	12,438
Building Core	18,854
Main Aisles	14,974
Security/Guard Station	1,780
Conference Rooms	14,490
Reproduction Facility	3,849

McDonnell Douglas Aerospace
Space and Defense Systems

11 March 1996
A96-J132-JAS-96-206

D. Todd Standlee/HF-96
The Boeing Company
P. O. Box 58747
1045 Gemini
Houston, Texas 77258-8747

Subject: FACILITY COSTS FOR TOWER II; BOEING SUBCONTRACT HX3200
(MEMBER HX3221) - ISS PROGRAM

Reference: Your fax dated March 6, 1996

1. In response to the referenced letter, we have reviewed your additional questions relative to the facility costs for Tower II and offer the following responses. For ease of discussions, we have listed your questions and our responses.

Question 1: Page 2 of MDA letter, No. 2, second sentence. FAR requires 2 gates "originally reasonable" and "not subject to reduction or elimination by subletting." Answer both.

Response: The presumption of FAR 31.205-17(c) is that idle capacity costs are allowable if necessary or originally reasonable. An exception to the presumption of allowability may occur if idle capacity is "subject to reduction or elimination by subletting, renting, or sale, in accordance with sound business, economics, or security practices."

FAR 31.205-17(c). Paragraph 3 and Attachment 1 to the MDA 4 March 1996 response clearly establishes that MDA made all reasonable effort to mitigate costs associated with Tower II while trying to obtain NASA guidance on its disposition.

Question 2: Page 2 of MDA letter, No. 2 last sentence of 1st paragraph. Was the referenced 18 July 94 proposal negotiated and definitized and is there documentation reflecting the definitized agreement?

Response: No. This proposal was not negotiated.

Question 3: Page 2 of MDA letter, No. 2, 2nd paragraph, 4th sentence. Who in NASA orchestrated move of 98 personnel and is it documented?

Response: Susan Graham, the NASA Lead for the Space Station Software Development Integration Laboratory (SDIL), requested that MDA move 98 personnel from Tower II to the SCTF (formerly CLDF). This was a verbal request and reflected her intent to collocate the members of the SDIL team in a common location. Additionally, utilization of NASA facilities, rather than MDA facilities resulted in downward adjustment of \$8,203,642 to the MDA proposal to Boeing for ISS. The credit amount was submitted via MDA letter A3-J032-HEG-B9400514 dated 14 December 1994 in response to Boeing letter 2-4400-DTS94-406 dated December 5, 1994.

Question 4: Page 3 of MDA letter, 5.a. second sentence. Who in NASA made recommendations, is it documented?

Response: These recommendations were made by Dan Tam, the NASA Business Manager for the Space Station Program Office. It was documented by a memo for file by Mr. John Schuessler.

Question 5: Page 4 of MDA letter, 6.a, 3rd line. "MDA made several efforts to mitigate..." What actions? Is there anything more than what is in the chronology?

Response: Yes, will provide more detail by 15 March 1996.

Question 6: Page 4 of MDA letter, 6.d, 3rd line. "right of first refusal..." Is this documented?

Response: NASA's right of first refusal stems from its rights defined in the SSF contract and the FAR to direct the disposition of all property for which a terminated contractor submits a claim in its termination settlement proposal in accordance with FAR 52.249-6. See also the reference in para. 2 to MDA's termination settlement facilities. NASA has already acquired the Clear Lake Development Facility and has continued to express interest in occupying or acquiring Tower II.

Question 7: Page 4 of MDA letter, 6.f., 1st line. Who in NASA requested more/how documented.

Response: Susan Graham requested approximately 100 MDA and subcontractors personnel from Tower II to the SCTF (formerly CLDF).

Question 8: Chronology-Dec. 1994. Is there any documentation of "NASA interest?"

Response: The NASA Contracting Officer who signed the NBL contract expressed interest in purchasing Tower II and is documented in our negotiation files.

Question 9: Chronology-Dec. 1994. Who requested the move of 98 employees and is it documented?

Response: Same as 3 above.

Question 10: Chronology-Jan. 1995. Is Spacehab a tenant now?

Response: Yes. Spacehab is currently a tenant but they are planning to leave in April, 1996.

Question 11: Chronology-March 9, 1995. Who was NASA representative?

Response: Dan Tam, the NASA Business Manager for the Space Station Program Office, was the NASA representative.

Question 12: Chronology-April 25, 1995. Who was NASA representative?

Response: Same as 11 above.

Question 13: Chronology-May 15, 1995. Is the message documented on [d] who in NASA directed?

Response: The message is documented via an MDA E-Mail dated April 4, 1995 (Enclosure 1) and was directed by Dan Tam.

Question 14: Chronology-September 15, 1995. Is Microcraft the tenant on Level 3?

Response: Yes; however, Microcraft moved to Level 6 to make room for Boeing.

Question 15: Chronology-November 20, 1995. Is FAA still a tenant and on what level?

Response: Yes. Level 5.

Question 16: Chronology-January 27, 1996. If Seachem and FAA were staying, what was to happen to Microcraft and Spacehab?

Response: Microcraft has been moved to level 6 (Question 14); and Spacehab is moving out (Question 10).

Question 17: Chronology-February 9, 1996. Is Seachem the 4th tenant and on what level?

Response: Seachem is the 5th tenant on Level 3.

Question 18: Attachment 2, Page 3, Paragraph 9. 3825, 250 and 688 only add to 4,763, not 5,263. Clarify numbers in that whole sentence.

Response: 500 square feet were inadvertently omitted. This amount consists of security surveillance, badging and photo.

Question 19: Verbal Question from Marianne Bachstein, NASA/JSC, on 3/6/96. Need the percentage of occupancy for each tenant in Tower II.

Response:

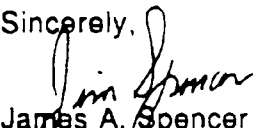
	<u>Square Feet</u>	<u>Percentage</u>
• Boeing	29,600	17.50%
• FAA	15,275	9.03%
• Seachem	12,146	7.18%
• Microcraft	1,650	.98%
• Spacehab	<u>1,100</u>	<u>.66%</u>
Total	59,771	

Total Rentable Square Feet

169,167

2. Additional questions or comments may be addressed to the undersigned at 244-4054.

Sincerely,


James A. Spencer
Contract Manager
Space Station

JAS/dlb

Enclosure

cc: Marianne Bachstein/NASA

From: Hayes.Hinton
Date: Tue, Apr 4, 1995 8:32 AM
Subject: Brinkley Tagup, 4/4/95

To: Acosta/Wensley; Bivins, Treva; Collins.Mike; Crosse.Selstad; Estep.Bess; Fulcher.Clay; Geery.Paul; Hauser.Howard; Howard.Clarence; Hull.Heil; Kelly.John; Kennedy.Mike; Kersels.George; Linford, Rodney; Ludwig.Uribe; Matthews.Shelton; Michaelis.Riordan; Musial.Wayne; Niblo.Duquette; Nickles.Mary Lou; Nobles, Noel; Oetker.Martha; Overmyer.Bob; Pannett.Bob; Petersburg.Ron; Polite.Tom; Raetz.Merryman; Riel.O'Nan; Schluter.Hernandez; Schuessler.John; Schweikle.McNeff; Slazer, Frank; Spencer.James; Ward.John BOE; Warner.Darrell; Webb/Duke; Wilhelm.Pat; Woods.Tom; Zangl.Tom; Zimmerman.Towarnicki

- This is the 1st day of a three-day IPT leadership training session being held offsite in the Boeing building.
- Chet Vaughan mentioned that he sat through an X35 briefing that is to be given to Dr. Little today. No details.
- Everyone was impressed with the Lee Bussard briefing yesterday. Brinkley wants to arrange to have the program people at MSFC hear Bussard's briefing. As an aside, Bussard was diagnosed with Cerebral Palsy at 5 months and was never expected to be able to walk or talk. His briefing, "More Alike than Different," deals with how we perceive people in general--not only those with obvious disabilities but ourselves also. It also dealt with those perceptions affect one's actions, and he challenged the audience to achieve to a level beyond that inherent in some "label" that someone else had assigned to them. Highly motivational and thought provoking.
- • Bates reported that a decision had been reached on which group would move to the 3rd and 5th floors of Tower II, and that the people involved need to get ready to move (he did not give a date). About 280 people are involved from the following organizations:

Ground Facilities
Utilization
Operations
Information Systems AIT
BMO (minus BMO management)

He commented that two options were considered relative to which groups would move. The option that included the Program Office was rejected because it was not politically acceptable to move offsite.

AL-96-147

June 6, 1996

TO: OG/Contracting Officer
FROM: AL/Attorney-Advisor
SUBJECT: Contract NAS15-10000
McDonnell Douglas Aerospace Corporation (MDAC)
Tower II Idle Capacity Costs

I offer a legal analysis concerning the allowability of lease costs for the unused portions of the Tower II facility. As I understand it, some percentage of the total building area was not and is not being used to support work under the subject contract. Such space is properly termed "idle capacity" since it is unused capacity of a partially used facility. FAR Part 31.205-17(a).

Idle capacity costs are allowable provided, first, that the capacity is necessary or was originally reasonable, and, second, that such costs are not subject to reduction or elimination by subletting, renting, or sale, in accordance with standard business practices. FAR Part 31.205-17(c). There is no presumptive limitation in the regulations concerning the length of time idle capacity costs can be allowable under a contract.

The allowability of costs for "idle facilities," those that are completely unused and in excess of the contractor's needs, is determined by a similar test. Such costs are allowable if the facilities were necessary when acquired and are now idle because of program changes which could not have been reasonably foreseen. These costs are allowable "for a reasonable period, ordinarily not to exceed one year, depending on the initiative taken to use, lease or dispose of the facilities." FAR Part 31.205-17(b)(2).

First, it must be determined whether (1) facilities or capacity were necessary or reasonable when acquired and (2) are now idle based on changes in program requirements that could not reasonably have been foreseen. Id.

Whether facilities or capacity were necessary or reasonable is a business decision to be evaluated based on all the information available to the contractor at the time the decision was made. Further, contractor reliance on Government predictions and assertions concerning future contract as well as broader

program needs typically allow a contractor to successfully assert that it could not have reasonably foreseen future changes inconsistent with the initial predictions. See Lockheed-Georgia Company, A Division of Lockheed (“Lockheed”), ASBCA No. 27660, 90-3 BCA ¶ 22,957 (C-141 airplanes necessary to perform required demonstration flights for potential commercial and foreign military sales buyers, and contractor could not have predicted lack of demand for the plane); General Dynamics Corporation, ASBCA No. 19607, 78-1 BCA ¶ 13,203 (light manufacturing plant necessary to perform multiple military aircraft electronics contracts and contractor could not have anticipated Government’s subsequent notice of decreased aircraft buys); Aerojet General Corporation, ASBCA Nos. 15703, 15704, 73-1 BCA ¶ 9932 (new plant at the selected site necessary if contractor was going to participate in large solid rocket motor program envisioned by the Government and contractor could not have foreseen that Government would not go forward with program).

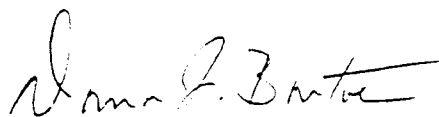
Second, idle costs only are allowable for a reasonable period. As to the one-year period specified for idle facilities, this is simply a reasonableness “benchmark.” The contractor can establish a reasonable period for the allowability of facilities costs beyond a year by demonstrating diligent and reasonable efforts with respect to their initiatives to get rid of the facility. See Lockheed (costs associated with idle airplanes allowable for three-year period while contractor made efforts to sell; market was limited and unique); General Dynamics (costs of light manufacturing plant which company shut down because of decline in DOD contracts as well as overall bad economy allowable for two-and-a-half year period when contractor made diligent efforts to offload and no act or omission on the part of the contractor delayed the ultimate sale); Aerojet (costs of solid rocket motor plant allowable for three-year period because the contractor was diligent in efforts to dispose of).

Although a reasonableness time benchmark is not specified with respect to idle capacity cost, the efforts of the contractor in trying to dispose of the idle capacity are nonetheless examined in determining the allowability of the cost. See Fiesta Leasing and Sales, Inc., ASBCA No. 29311, 87-1 BCA ¶ 19,622 (in a termination for convenience settlement, idle capacity costs for buses were allowed for a two-and-a-half year period; the contractor mitigated some portion of these costs by leasing a number of the buses prior to the end of the contract period).

In sum, MDAC’s idle capacity costs would likely be found by a board or court to be allowable based on the standards outlined above, and the facts as we understand them. Note that the Government has the burden to show that a contract cost asserted by the contractor is unallowable by statute, regulation or contract provision. Lockheed at 115,276. Since no question has been raised as to MDAC’s need for the building under the Work Package 2 contract, NASA would have to demonstrate that MDAC was not making reasonable efforts to offload the idle capacity in order to find the costs

unallowable. This may also be a difficult showing to make, given that the boards appear to consider any efforts to mitigate "reasonable" and that they also consider the local market conditions together with such efforts in reaching their allowability conclusions. In its March 4, 1996, letter, MDAC has detailed "continuous, extensive efforts to mitigate costs associated with Tower II" since the March 1995 timeframe, some of which it asserts have successfully reduced the costs to the Government.

Additionally, MDAC has stated that it was somewhat delayed in its attempts to find tenants for unused space due to actions of Government personnel. At some point, it appears that NASA expressed its intent to house a significant number of Government and other Space Station contractor personnel in Tower II, and floor plans for NASA occupancy were allegedly prepared. Discussions were also conducted concerning the possibility of the Government's acquisition of the property. Finally, MDAC also points out that that NASA has "frequently" used (extensively documented) and continues to use portions of Tower II. These facts would not be helpful to the Government in trying to make a case for disallowing idle capacity costs.



Donna J. Bartoe

cc:

OG/Marianne Bachstein



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Reply to Attn of OG3-96-265

JUN 11 1996

Boeing Defense and Space Group
Missiles and Space Division
Attn: HF-96/Michael Clynch
P.O. Box 58747
Houston, TX 77258

Subject: Contract NAS15-10000; Office of Inspector General (IG)
Discussion Draft Audit Report, Space Station Facilities
Requirements, Assignment No. A-JS-95-002

The subject audit report questioned the allowability and reasonableness of the costs of facilities being charged to the Government for office space in the McDonnell Douglas Aerospace (MDAC) - Space Station Division Tower II Facility.

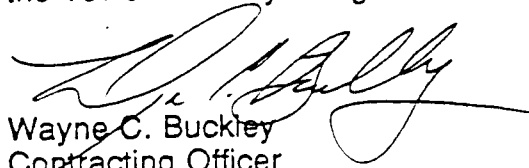
For costs associated with the unused portions of the building (idle capacity costs), the Government has determined that there is not a basis to find these costs unallowable at this time. These costs will continue to be allowable only for a reasonable period, and this must be coupled with a demonstration of diligent efforts to mitigate such costs.

For costs associated with the portions of the building being utilized in performance of the subject contract, NASA has questions concerning the reasonableness of such costs during the time period of the subject audit. The Space Station Program Office (SSPO) concedes that the space utilization survey conducted by the IG may not have been performed in compliance with the Government's own standards, and the resultant size and cost of office space per person may not have been correctly calculated as pointed out in MDAC's March 4, 1996 letter on this subject. Even if the SSPO were to accept the MDAC calculations, the available office space per person would appear to be on the order of 200 square feet/person (see p. 3-4 of the "Comparison of IG's Discussion Draft Analysis with Guidance in NASA Provided Federal Property Management Regulations" attachment to the March 4, 1996, MDAC letter).

Recognizing that the Government's standards for office space are not directly binding on a contractor, the Tower II MDAC office space size is still well above such standards. Therefore, the SSPO is questioning the reasonableness of the resultant costs of this size office space since no information has been provided justifying the higher office space allocation. Accordingly, the burden is on the contractor to establish that the costs associated with the Tower II office space being utilized in performance of the subject contract are reasonable. Factors that the Government will consider in making a reasonableness determination

include whether the costs are of a type generally recognized as ordinary and necessary, and whether they comport with generally accepted sound business practices or industry standards.

In order to meet the contractor's burden of proof concerning the reasonableness of the questioned costs, please provide any relevant information by June 24, 1996, and direct any questions to the undersigned. As a final matter, be advised that the Government will continue to closely scrutinize the reasonableness of any future office space costs associated with the portions of the Tower II facility being utilized in the performance of the subject contract.



Wayne C. Buckley
Contracting Officer

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
2101 NASA Road 1
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Reply to Attn of:

BQ

JUL 23 1996

TO: W-JS/OIG Audit Field Manager

FROM: BA/Internal Management Control Officer

SUBJECT: Clarification of Issues Regarding Management's Response to OIG's Audit of Space Station Facilities Requirements, A-JS-95-002

The purpose of this letter is to clarify JSC's position regarding the findings of recommendation 2 from the subject audit assignment.

Recommendation 2 stated: "The Contracting Officer should recover excessive contractor billings for unreasonable facility costs."

We concur with the intent of the recommendation, but an extensive review has determined that the facility costs are allowable thus the Government does not have a legal basis to recover the monies. We base this determination on a chronology of events. Tower II was designed and constructed specifically for use in support of the Space Station Freedom contract. The draft audit report stated that as part of the Space Station Freedom Work Package II termination, NASA paid for one year of lease cost. Thus, the questioned costs arise from the second year of the contract period of performance under contract NAS15-10000. In a letter dated June 6, 1996, the JSC Legal Office stated that, while idle costs only are allowable for a reasonable period, the one year period specified is simply a reasonableness "benchmark." The contractor can establish a reasonable period for the allowability of facilities costs beyond a year by demonstrating diligent and reasonable efforts with respect to their initiatives to get rid of the facility.

During the period of time in question, several proposals were made by McDonnell Douglas Aerospace (MDA) regarding the facilities including a proposal that major portions of Tower II be occupied by Boeing and NASA, which would have greatly reduced the unoccupied space. MDA asserts that they actively sought lease agreements from a variety of businesses and Government agencies to mitigate the Tower II idle capacity costs. The Federal Acquisition Regulation provides that idle capacity costs are costs of doing business and are normally allowable if the capacity is necessary or was originally reasonable. Based on the above events, we determined the costs were allowable, and the Government does not have a legal basis to recover the \$2.9 million as recommended in the draft audit report.

With your acceptance of this determination, we will consider this recommendation to be closed upon issuance of the final report. If you have any questions, please call Pat Ritterhouse at 483-4220.


Debra L. Johnson

cc:

AC/S. H. Garman

OAW. V. Bates

OG/M. A. Bachstein

BQ/PRitterhouse:7/15/96:34220

Rewritten: DLJohnson:lsd:7/22/96:34157

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