

National Aeronautics  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771



Reply to Attn of:

216

OCT 8 1999

Raytheon STX Corporation  
Attn: Ms. Julie Smith  
4400 Forbes Boulevard  
Lanham, MD 20706

Subject: Contract NAS5-98156, Technical Incentive Fee  
Evaluation Period 1

A technical evaluation of your company's performance for the period 12/01/98 through 05/31/99 was conducted in accordance with Clause G.14 "Contract Fee Structure" contained in the subject contract. As indicated in the enclosed memorandum, this evaluation determined that your company has earned 97.62% of the available fee for this period. This results in an earned technical fee of \$98,782.90. Please submit an invoice to this office for this amount. The invoice should state that it results from payment of earned technical fee.

If you have any questions, I can be reached at 301-286-6993.

A handwritten signature in cursive script that reads "Mary V. Stevens".

Mary V. Stevens  
Contracting Officer

Enclosure



Reply to Attn of:

633

September 22, 1999

**TO:** 216/Contracting Officer, Ms. Mary Stevens  
**FROM:** 633/National Space Science Data Center/George Fleming  
**SUBJECT:** PBC Evaluation of NAS5-98156 for December 1998 to May 1999

I have reviewed the Performance Based Metrics (PBC) scores for Contract NAS5-98156 for the evaluation period of December 1998 through May 1999, inclusive.

I have conducted an inspection of the raw numbers used in the Raytheon SSDOO Technical Incentive Fee Report; reviewed the mechanisms used to produce the raw and final numbers; and have reviewed these numbers with responsible Government staff. While most numbers are input manually at one time or other, I am confident that they accurately reflect Raytheon's performance, as measured by the PBC standards in the Contract.

The contractor has performed at an exceptional level. The award fee is calculated as follows:

Work Element	Unweighted Score	Weight	Weighted Score
1.1 Metrics Tracking System	.7	4	2.8
1.2 NSSDC Data operations	.9885	44	43.49
1.3 Information Systems Operations	.94	8	7.52
1.4 Computing System Operations	1	12	12
1.5 ROSAT Science Data Processing and Management	1	12	12
1.6 ASCA Science Data Processing and Management	1	12	12
1.7 Electronic Handbooks	0	0	0

		92	89.81
Final Percentage (Weighted score ÷ Total of Possible Weights)			97.62



George Fleming

cc: Dr. Green/630  
Ms. Laubenthal/630  
Dr. Pisarski/631  
Dr. King/633

Work Element 400  
No Metrics

Work Element 410 - Work Element 1: Metrics Tracking  
Evaluated by inspection.

Metric 1: Metrics Database Developed and Initially Populated  
This metric was accomplished within the two-month criterion for an Outstanding rating.

Metric 2: Database Maintained Current  
The metric states that "one or more items more than 4 working days out of date - failing." Using this criterion, the rating is Failing. Some metrics are updated once each month, as measured by their visibility via the web pages starting at <http://ndadsnt1.gsfc.nasa.gov/ssdooccb/mtsdb.htm>. Some metrics (Work Elements 450, 460, and 470) were not on the Web at the end of the reporting period.

Work Element 420 - Work Element #2: NSSDC Data Operations  
Note: Data entries are made via a combination of electronic and manual methods, unless otherwise specified.  
Note: Databases were inspected manually by the PBC Manager, unless otherwise specified.

Metric 3: NDADS-destined electronic data are ingested  
All files ingested within one day or less; Outstanding.

Metric 4: ISTP Key Parameter and Related Data  
All files save one processed within 1 day (99.996%); all within 2 days;  
Outstanding.

Metric 5: Longest Interval between arrival and complete NDADS processing  
Calculation automatically made from M3.  
Longest interval was 1.12 days; Outstanding.

Metric 6: NDADS Ingested Data (Physically Received)  
Performed manually.  
However, no such data physically received.

Metric 7: Data Written to Backup Media Within 4 Days of Arrival  
Note: The Government certifies that this metric does not apply to ISTP CDHF data.  
All data written within 4 days; Outstanding.

Metric 8: Media monitoring  
No activity; pending final agreement between the Government and the Contractor on the Archive Management Plan.

Metric 9: Media Replacement

No activity; pending final agreement between the Government and the Contractor on the Archive Management Plan.

Metric 10: Transition of Initial Archive to Plan

No activity; pending final agreement between the Government and the Contractor on the Archive Management Plan.

Metric 11: Environmental/Security Checks

No activity; pending final agreement between the Government and the Contractor on the Archive Management Plan.

Metric 12: CD-ROM and Off-the-shelf Requests

Largely manually entered.

437 of 440 requests completed within two days (99.32%); all within 5 days; Outstanding.

Metric 13: Requests for Photos and Other Replicable Media

Largely manually entered.

250 of 256 requests completed within 2 days; all within 5 days; Outstanding.

Metric 14: Accuracy of Request Services

Strictly manually entered.

695 of 696 OK; one UPS shipment of 6 lunar maps lost (not replaceable); 99.86%; Outstanding.

Metric 15: User Satisfaction Level

Strictly manually entered.

One dissatisfied requester out of 1,866 (99.95%); Outstanding.

Work Element 430 - Work Element #3: Information Systems Operations

Metric 16: Appropriate Databases Populated with Acquired Information

Strictly manually entered.

All months took no longer than an average of 0.11 days; Outstanding.

Metric 17: All Information Databases Accessible and Fully Usable

Five of six months Outstanding; February 1999 failing; for this evaluation period: Passing.

Metric 18: Database Complaints Logged and Resolution Tracked

No activity until May 1999: Outstanding for that month (<1 day) and for the evaluation period.

Metric 19: On-Schedule Completion of Information System Reports

No activity in three months; none took longer than 60% of the scheduled completion time; Outstanding.

Work Element 440 - Work Element #4: Computer System Operations

Metric 20: Maximize Availability of Computing Systems  
In no month did the Availability fall below 99.82%; Outstanding.

Metric 21: Security Breaches Minimized  
No Security breaches; Outstanding.

Metric 22: Implement CCB-Approved Changes and Installations  
No activity.

Work Element 450 - Work Element #5: ROSAT Data Operations

Metric 23: Install and test ROSAT software/calibration upgrades provided by  
MPI  
Three months with installations, all of which were accomplished in no more  
than 5 days; Outstanding.

Metric 24: Report any problems from M23 to ROSAT GOF/MPI/SAO  
Problems in only April and May, all reported within one work day;  
Outstanding.

Metric 25: Implement M23 as part of standard ROSAT data processing  
Three months with implementations, all done within 2 work days;  
Outstanding.

Metric 26: Pipeline Testing/Validation  
Two months with test/validations, all done within one day; Outstanding.

Metric 27: Data products and intermediate data files provided to members of  
the USRSDC  
No activity.

Metric 28: Trend data and other data files distributed to members of the  
USRSDC  
All distributions completed within one day; Outstanding.

Metric 29: Response to communications from outside individuals  
All requests responded to within one day; Outstanding.

Metric 30: Generation and delivery of high-quality ROSAT data products to  
GO's and HEASARC (averaged over three months)  
No activity; no new data received.

Metric 31: ROSAT standard data processing results supplied to the ROSAT  
GOF/HEASARC

No activity; no new data received.

Metric 32: Reprocessing of ROSAT data  
No activity; no such requests received.

Work Element 460: Work Element #6: ASCA Data Operations

Metric 33: Install and test ASCA software/calibration upgrades provided by the ASCA GOF  
Three months reported with changes, all done within 10 days; Outstanding.

Metric 34: Report any problems from M33 to the ASCO GOF  
Three months with problems reported, all within one day: Outstanding.

Metric 35: Implement M33 as part of standard ASCO data processing  
Two months' implementation accomplished, done within 5 days; Outstanding.

Metric 36: Pipeline Testing/Validation  
Two months with Pipeline producing correct data on first attempt:  
Outstanding.

Metric 37: Response to communications from outside individuals  
All communications were responded to within one day: Outstanding.

Metric 38: Generation and delivery of high-quality ASCA data products to GO's and HEASARC (averaged over three months)  
The average was greater than, or equal to, 90 percent for every month:  
Outstanding.

Metric 39: ASCA standard data processing results supplied to the ASCA GOF/HEASARC  
The average was greater than, or equal to, 90 percent for every month:  
Outstanding.

Metric 40: Reprocessing of ASCA data  
No activity; no such requests received.

Work Element 470: Work Element #7: Electronic Handbooks  
Metric 41: No work order was requested for this metric.

End of PBC Evaluations for the period ending May 1999.

National Aeronautics and  
Space Administration

**Goddard Space Flight Center**  
Greenbelt, MD 20771



216

May 8, 2000

Reply to Attn of:

Raytheon STX Corporation  
Attn: Ms. Julie Smith  
4400 Forbes Boulevard  
Lanham, MD 20706

Subject: Contract NAS5-98156, Technical Incentive Fee  
Evaluation Period Number 2

Ref: (a) Raytheon STX Letter 00-JGS-0098 dated March 9,  
2000  
  
(b) Modification 23 and NASA letter dated March 2,  
2000

NASA has reevaluated Raytheon's performance for Metric M2 "Database is Maintained Current" for Technical Incentive Fee Evaluation Period 2 (06/01/99 - 11/30/99). We have determined that our initial analysis was incorrect and that the correct rating should have been outstanding for Metric M2. Therefore, the revised score for Technical Incentive Fee Evaluation Period 2 is 96.46 percent/\$97,609.08 (this represents a difference of 4 percent/\$4,047.65 from the original period 2 score). Please submit an invoice to this office for \$4,047.65. The invoice should state that it results from the payment of earned technical incentive fee.

If you have any questions, I can be reached at 301-286-6993.

A handwritten signature in cursive script that reads "Mary V. Stevens".

Mary V. Stevens  
Contracting Officer

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771



Reply to Attn of:

216

March 2, 2000

Raytheon STX Corporation  
Attn: Ms. Julie Smith  
4400 Forbes Boulevard  
Lanham, MD 20706

Subject: Contract NAS5-98156, Technical Incentive Fee  
Evaluation Period 2

A technical evaluation of your company's performance for the period 06/01/99 through 11/30/99 was conducted in accordance with Clause G.14 "Contract Fee Structure" contained in the subject contract. As indicated in the enclosed memorandum, this evaluation determined that your company has earned 92.46% of the available fee for this period. This results in an earned technical incentive fee of \$93,561.43. Please submit an invoice to this office for this amount. The invoice should state that it results from payment of earned technical incentive fee.

If you have any questions, I can be reached at 301-286-6993.

A handwritten signature in cursive script that reads "Mary V. Stevens".

Mary V. Stevens  
Contracting Officer

Enclosure

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771



633

March 1, 2000

Reply to Attn of:

To: 216/Contracting Officer/Ms. Mary Stevens  
From: 633/NSSDC/George Fleming  
Subject: PBC Evaluation of NAS5-98156 for June 1999, to November 1999

I have reviewed the Performance Based Metrics (PBC) scores for Contract NAS5-98156 for the evaluation period of June 1999 through November 1999, inclusive.

I have conducted an inspection of the raw numbers used in the Raytheon SSDOO Technical Incentive Fee Report; reviewed the mechanisms used to produce the raw and final numbers; and have reviewed these numbers with responsible Government staff. While some numbers are input manually at one time or other, I am confident that they accurately reflect Raytheon's performance, as measured by the PBC standards in the Contract.

The contractor has performed at an exceptional level. The technical incentive fee is calculated as follows:

Work Element	Unweighted Score	Weight	Weighted Score
1.1 Metrics Tracking System	.0	4	0
1.2 NSSDC Data operations	.9333	44	41.07
1.3 Information Systems Operations	1	8	8
1.4 Computing System Operations	1	12	12
1.5 ROSAT Science Data Processing & Mgmt.	1	12	12
1.6 ASCA Science Data Processing & Mgmt.	1	12	12
1.7 Electronic Handbooks	0	0	0
		92	85.07
Final Percentage (Weighted score ÷ Total of Possible Weights)			92.46

A handwritten signature in cursive script, appearing to read "George Fleming".

George Fleming

cc: 630/Dr. Green  
630/Dr. Laubenthal  
631/Dr. Pisarski

Work Element 400  
No Metrics

Work Element 410 - Work Element 1: Metrics Tracking  
Evaluated by inspection.

Metric 1: Metrics Database Developed and Initially Populated  
This metric is Not Applicable during this period.

Metric 2: Database Maintained Current  
The metric states that "one or more items more than 4 working days out of date - failing." Using this criterion, the rating is Failing. One metric was not updated correctly for some weeks after the start of the evaluation period, as observed at <http://ndadsnt1.gsfc.nasa.gov/ssdooccb/mtsdb.htm>.

Work Element 420 - Work Element #2: NSSDC Data Operations

Metric 3: NDADS-destined electronic data are ingested  
138,133 of 139,006 files (99.37%) ingested within one day or less; Outstanding.

Metric 4: ISTP Key Parameter and Related Data  
19,238 of 19,928 files processed within 1 day (96.54%); all within 2 days; Passing.

Metric 5: Longest Interval between arrival and complete NDADS processing  
Calculation automatically made from M3.  
Longest interval was 1.97 days; Outstanding.

Metric 6: NDADS Ingested Data (Physically Received)  
Performed manually.  
However, no such data physically received.

Metric 7: Data Written to Backup Media Within 4 Days of Arrival  
Note: The Government certifies that this metric does not apply to ISTP CDHF data.  
All data (146,453,299 blocks) written within 4 days; Outstanding.

Metric 8: Media monitoring  
No activity; pending final agreement between the Government and the Contractor on the Archive Management Plan.

Metric 9: Media Replacement  
No activity; pending final agreement between the Government and the Contractor on the Archive Management Plan.

Metric 10: Transition of Initial Archive to Plan

No activity; pending final agreement between the Government and the Contractor on the Archive Management Plan.

Metric 11: Environmental/Security Checks

No activity; pending final agreement between the Government and the Contractor on the Archive Management Plan.

Metric 12: CD-ROM and Off-the-shelf Requests

406 of 408 requests completed within two days (99.51%), all within 5 days; Outstanding.

Metric 13: Requests for Photos and Other Replicable Media

171 of 174 requests (98.28%) completed in 3 days or less; 172 (98.85%) within 7 days or less; Outstanding.

Metric 14: Accuracy of Request Services

Strictly manually entered.

583 of 584 OK; 99.83%; Outstanding.

Metric 15: User Satisfaction Level

Strictly manually entered.

One dissatisfied requester out of 1,267 (99.92%); Outstanding.

#### Work Element 430 - Work Element #3: Information Systems Operations

Metric 16: Appropriate Databases Populated with Acquired Information

Strictly manually entered.

All months took no longer than an average of 0.13 days; Outstanding.

Metric 17: All Information Databases Accessible and Fully Usable

Available 100% each month; Outstanding.

Metric 18: Database Complaints Logged and Resolution Tracked

No activity.

Metric 19: On-Schedule Completion of Information System Reports

No activity took longer than 68% of the scheduled completion time; Outstanding.

#### Work Element 440 - Work Element #4: Computer System Operations

Metric 20: Maximize Availability of Computing Systems

In no month did the Availability fall below 99.72%; Outstanding.

Metric 21: Security Breaches Minimized

No Security breaches; Outstanding.

Metric 22: Implement CCB-Approved Changes and Installations  
No activity.

#### Work Element 450 - Work Element #5: ROSAT Data Operations

Metric 23: Install and test ROSAT software/calibration upgrades provided by MPI  
One month with an installation (SASS7\_B\_1 release), done in one day; Outstanding.

Metric 24: Report any problems from M23 to ROSAT GOF/MPI/SAO  
No problems to report.

Metric 25: Implement M23 as part of standard ROSAT data processing  
One month with implementations, done within 1 workday; Outstanding.

Metric 26: Pipeline Testing/Validation  
One month with test/validation, done within one day; Outstanding.

Metric 27: Data products and intermediate data files provided to members of the USRSDC  
In each of two months, completed <1.3 days; Passing.

Metric 28: Trend data and other data files distributed to members of the USRSDC  
All distributions completed within one day; Outstanding.

Metric 29: Response to communications from outside individuals  
All requests responded to within one day; Outstanding.

Metric 30: Generation and delivery of high-quality ROSAT data products to GO's and HEASARC (averaged over three months)  
No activity; no new data received.

Metric 31: ROSAT standard data processing results supplied to the ROSAT GOF/HEASARC  
No activity; no new data received.

Metric 32: Reprocessing of ROSAT data  
No activity; no such requests received.

#### Work Element 460: Work Element #6: ASCA Data Operations

Metric 33: Install and test ASCA software/calibration upgrades provided by the ASCA GOF

One month reported with a change (GIOS temp2gain), done within 10 days;  
Outstanding.

Metric 34: Report any problems from M33 to the ASCO GOF  
No problems to report.

Metric 35: Implement M33 as part of standard ASCO data processing  
One month's implementation accomplished, done within 5 days; Outstanding.

Metric 36: Pipeline Testing/Validation  
Four months with Pipeline producing correct data on first attempt: Outstanding.

Metric 37: Response to communications from outside individuals  
All communications were responded to within one day: Outstanding.

Metric 38: Generation and delivery of high-quality ASCA data products to GO's and  
HEASARC (averaged over three months) for 80% of new observations within 15  
work days of receipt of the ASCA raw telemetry from ISAS as averaged over a period  
of three months.  
The average was greater than, or equal to, 90 percent for every month: Outstanding.

Metric 39: ASCA standard data processing results supplied to the ASCA  
GOF/HEASARC for 80% of all new observations received from ISAS within 16 work  
days of receipt of the ASCA raw telemetry from ISAS as averaged over a 3 month  
interval.  
The average was greater than, or equal to, 90 percent for every month: Outstanding.

Metric 40: Reprocessing of ASCA data  
No activity; no such requests received.

Work Element 470: Work Element #7: Electronic Handbooks  
Metric 41: No work order was requested for this metric.

End of PBC Evaluations for the period ending November 1999.

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771



Reply to Attn of:

216

AUG 15 2000

Raytheon STX Corporation  
Attn: Ms. Lori Weber  
4400 Forbes Boulevard  
Lanham, MD 20706

Subject: Contract NAS5-98156, Technical Incentive Fee  
Evaluation Period 3

A technical evaluation of your company's performance for the period 12/01/99 through 05/31/00 was conducted in accordance with Clause G.14 "Contract Fee Structure" contained in the subject contract. As indicated in the enclosed memorandum, this evaluation determined that your company has earned 92.47% of the available fee for this period. This results in an earned technical incentive fee of \$73,657.90. Please submit an invoice to this office for this amount. The invoice should state that it results from payment of earned technical incentive fee.

If you have any questions, I can be reached at 301-286-6993.

A handwritten signature in cursive script that reads "Mary V. Stevens".

Mary V. Stevens  
Contracting Officer

Enclosure



August 8, 2000

Reply to Attn of: 633

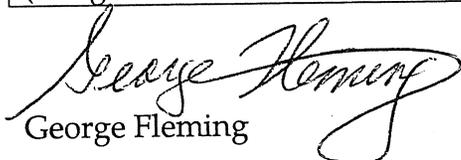
TO: 216/Contracting Officer/Ms. Mary Stevens  
FROM: 633/NSSDC/George Fleming  
SUBJECT: PBC Evaluation of NAS5-98156 for December 1999, to May 2000

I have reviewed the Performance Based Metrics (PBC) scores for Contract NAS5-98156 for the evaluation period of December 1999 through May 2000, inclusive.

I have conducted an inspection of the raw numbers used in the Raytheon SSDOO Technical Incentive Fee Report; reviewed the mechanisms used to produce the raw and final numbers; and have reviewed these numbers with responsible Government staff. While some numbers are input manually at one time or other, I am confident that they accurately reflect Raytheon's performance, as measured by the PBC standards in the Contract.

The contractor has performed at an exceptional level. The technical incentive fee percentage is calculated as follows:

Work Element	Unweighted Score	Weight	Weighted Score
1.1 Metrics Tracking System	1	4	4
1.2 NSSDC Data operations	1	44	44
1.3 Information Systems Operations	1	8	8
1.4 Computing System Operations	1	12	12
1.5 ROSAT Science Data Processing & Mgmt.	1	12	12
1.6 ASCA Science Data Processing & Mgmt.	1	12	12
1.7 Electronic Handbooks	1	8	8
1.8 Data Systems Development	.297436	12	3.56923
		112	103.56923
Final Percentage (Weighted score ÷ Total of Possible Weights)			92.473

  
George Fleming

cc: 630/Dr. Green  
630/Dr. Laubenthal  
633/Dr. King

Work Element 400  
No Metrics

Work Element 410 - Work Element 1: Metrics Tracking  
Evaluated by inspection.

Metric 1: Reserved

Metric 2: Database Maintained Current

The metric states "No information more than 2 working days after the end of the month". The system was updated within 2 working days of the end of each month. Outstanding.

Work Element 420 - Work Element #2: NSSDC Data Operations

Metric 3: NDADS-destined electronic data are ingested  
117,272 of 117,272 files (100%) ingested within one day or less; Outstanding.

Metric 4: ISTP Key Parameter and Related Data  
29,679 files processed within 1 day (100%); Outstanding.

Metric 5: Longest Interval between arrival and complete NDADS processing  
Calculation automatically made from M3.  
Longest interval was 0.98 days; Outstanding.

Metric 6: NDADS Ingested Data (Physically Received)  
Performed manually.  
However, no such data physically received.

Metric 7: Data Written to Backup Media Within 4 Days of Arrival  
Note: The Government certifies that this metric does not apply to ISTP CDHF data.

All data (97,243,393 blocks) written within 4 days. The longest time took 2.41 days; Outstanding.

Metric 8: Media monitoring

Fifty samples scheduled for deterioration. Sixty were sampled; 120% of goal reached; Outstanding.

Metric 9: Media Replacement

Five hundred units were scheduled for replacement; 1,830 were replaced; 366% of goal reached; Outstanding.

Metric 10: Transition of Initial Archive to Plan

Five hundred units were scheduled for transition; 1,830 were transitioned; 366% of goal reached; Outstanding.

Metric 11: Reserved.

Metric 11A: Environmental Monitoring

Charts and equipment maintained; records kept; Government informed of environmental temperature and humidity problems. This was accomplished; Outstanding.

Metric 11B: Security Monitoring

All goals achieved; Outstanding.

Metric 12: CD-ROM and Off-the-shelf Requests

437 of 442 requests completed within two days (99.87%), all within 5 days; Outstanding.

Metric 13: Requests for Photos and Other Replicable Media

190 of 191 requests (99.48%) completed in 3 days or less; all within 7 days or less; Outstanding.

Metric 14: Accuracy of Request Services

Strictly manually entered.

630 of 630 OK; 100%; Outstanding.

Metric 15: User Satisfaction Level

Strictly manually entered.

Two dissatisfied requesters out of 736 (99.73%); Outstanding.

#### Work Element 430 - Work Element #3: Information Systems Operations

Metric 16: Appropriate Databases Populated with Acquired Information

Strictly manually entered.

All months took no longer than an average of 0.15 days; Outstanding.

Metric 17: All Information Databases Accessible and Fully Usable

Available 100% each month; Outstanding.

Metric 18: Database Complaints Logged and Resolution Tracked

No activity.

Metric 19: Reserved

Metric 19A: FILX report prepared and disseminated by February 1; on time;

Outstanding.

Metric 19B: SATX report prepared and disseminated by May 1; on time;

Outstanding.

Metric 19C: SPACEWARN reports prepared and delivered by the first of each month; on time; Outstanding.

Metric 19D: NSSDC Newsletter: Delivery schedule met; Outstanding.

Work Element 440 - Work Element #4: Computer System Operations

Metric 20: Maximize Availability of Computing Systems  
In no month did the availability fall below 99.80%; Outstanding.

Metric 21: Security Breaches Minimized  
No Security breaches; Outstanding.

Metric 22: Implement CCB-Approved Changes and Installations  
No activity.

Work Element 450 - Work Element #5: ROSAT Data Operations

Metric 23: Install and test ROSAT software/calibration upgrades provided by  
MPI

One month with an update; done in less than five days; Outstanding.

Metric 24: Report any problems from M23 to ROSAT GOF/MPI/SAO  
No problems to report.

Metric 25: Implement M23 as part of standard ROSAT data processing  
One month with implementations, done within 1 workday; Outstanding.

Metric 26: Pipeline Testing/Validation  
One month with test/validation, done within one day; Outstanding.

Metric 27: Data products and intermediate data files provided to members of  
the USRSDC  
No Activity.

Metric 28: Trend data and other data files distributed to members of the  
USRSDC  
No Activity.

Metric 29: Response to communications from outside individuals  
No Activity.

Metric 30: Generation and delivery of high-quality ROSAT data products to  
GO's and HEASARC (averaged over three months)  
No activity; no new data received.

Metric 31: ROSAT standard data processing results supplied to the ROSAT  
GOF/HEASARC  
No activity; no new data received.

Metric 32: Reprocessing of ROSAT data  
No activity; no such requests received.

Work Element 460: Work Element #6: ASCA Data Operations

Metric 33: Install and test ASCA software/calibration upgrades provided by the ASCA GOF

Four months reported with a change (GIS temp2gain, FTOOLS 5.0), all done within 10 days; Outstanding.

Metric 34: Report any problems from M33 to the ASCO GOF

One problem reported within one day; Outstanding.

Metric 35: Implement M33 as part of standard ASCO data processing

One month's implementation accomplished, done within 5 days; Outstanding.

Metric 36: Pipeline Testing/Validation

Two months with Pipeline producing correct data on first attempt (7.3.8, 7.4.0): Outstanding.

Metric 37: Response to communications from outside individuals

All communications were responded to within one day: Outstanding.

Metric 38: Generation and delivery of high-quality ASCA data products to GO's and HEASARC (averaged over three months) for 80% of new observations within 15 work days of receipt of the ASCA raw telemetry from ISAS as averaged over a period of three months.

The average was greater than, or equal to, 90 percent; Outstanding.

Metric 39: ASCA standard data processing results supplied to the ASCA GOF/HEASARC for 80% of all new observations received from ISAS within 16 work days of receipt of the ASCA raw telemetry from ISAS as averaged over a 3 month interval.

The average was greater than, or equal to, 90 percent for every month:

Outstanding.

Metric 40: Reprocessing of ASCA data

No activity; no such requests received.

Work Element 470: Work Element #7: Electronic Handbooks

Metric 41: No work order was requested for this metric.

Metric 42: The Contractor shall maximize the availability of EHB systems:

Every month had 100% availability except January, which had 99.8329% availability; Outstanding.

Metric 43: On-time Delivery of Requested EDCATS Modifications  
All modifications delivered on time: Outstanding

Work Element 400: Data Systems Development

Metric 44: Deliveries due within 95% of schedule for outstanding, 105% for passing, later than that, failing.

AR 11, DIOOnAS deployment, was given a failing rating (0); AR 18, Document Schedule A1 Systems, was given a passing rating (0.8). Given each AR's weight, a score for M44 of 0.297436 was achieved.

End of PBC Evaluations for the period ending May 2000 (inclusive).

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771



Reply to Attn of:

216

December 22, 2000

Raytheon STX Corporation  
Attn: Ms. Julie Smith  
4400 Forbes Boulevard  
Lanham, MD 20706

Subject: Contract NAS5-98156, Technical Incentive Fee  
Evaluation Period 4

A technical evaluation of your company's performance for the period 06/01/00 through 11/30/00 was conducted in accordance with Clause G.14 "Contract Fee Structure" contained in the subject contract. As indicated in the enclosed memorandum, this evaluation determined that your company has earned 96.17% of the available fee for this period. This results in an earned technical incentive fee of \$76,605.18. Please submit an invoice to this office for this amount. The invoice should state that it results from payment of earned technical incentive fee.

If you have any questions, I can be reached at 301-286-6993.

  
Mary V. Stevens  
Contracting Officer

Enclosure



Reply to Attn of: 633

December 13, 2000

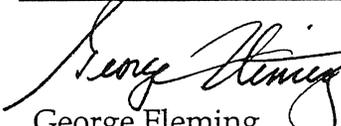
TO: 216/Contracting Officer/Ms. Mary Stevens  
FROM: 633/NSSDC/George Fleming  
SUBJECT: PBC Evaluation of NAS5-98156 for June to November 2000

I have reviewed the Performance Based Metrics (PBC) scores for Contract NAS5-98156 for the evaluation period of June 2000 through November 2000, inclusive.

I have conducted an inspection of the raw numbers used in the Raytheon SSDOO Technical Incentive Fee Report; reviewed the mechanisms used to produce the raw and final numbers; and have reviewed these numbers with responsible Government staff. While some numbers are input manually at one time or other, I am confident that they accurately reflect Raytheon's performance, as measured by the PBC standards in the Contract.

The contractor has performed at an exceptional level. The technical incentive fee percentage is calculated as follows:

Work Element	Unweighted Score	Weight	Weighted Score
1.1 Metrics Tracking System	1	4	4
1.2 NSSDC Data operations	1	44	44
1.3 Information Systems Operations	0.941176	8	7.529408
1.4 Computing System Operations	1	12	12
1.5 ROSAT Science Data Processing & Mgmt.	1	12	12
1.6 ASCA Science Data Processing & Mgmt.	1	12	12
1.7 Electronic Handbooks	1	8	8
1.8 Data Systems Development	0.681712	12	8.180545
		112	107.709953
Final Percentage (Weighted score ÷ Total of Possible Weights)			96.1696

  
George Fleming

cc: 630/Dr. Green  
630/Ms. Laubenthal  
633/Dr. King

Work Element 400  
No Metrics

Work Element 410 - Work Element 1: Metrics Tracking  
Evaluated by inspection.

Metric 1: Reserved

Metric 2: Database Maintained Current

The metric states "No information more than 2 working days after the end of the month". The system was updated within 2 working days of the end of each month. One delay of two days was noted when a computer not in the contract was out of service. Outstanding.

Work Element 420 - Work Element #2: NSSDC Data Operations

Metric 3: NDADS-destined electronic data are ingested  
104,644 of 104,644 files (100%) ingested within one day or less; Outstanding.

Metric 4: ISTP Key Parameter and Related Data  
27,057 of 27,057 files processed within 1 day (100%); Outstanding.

Metric 5: Longest Interval between arrival and complete NDADS processing  
Calculation automatically made from M3.  
Longest interval was 0.36 days; Outstanding.

Metric 6: NDADS Ingested Data (Physically Received)  
Performed manually.  
However, no such data physically received.

Metric 7: Data Written to Backup Media Within 4 Days of Arrival  
Note: The Government certifies that this metric does not apply to ISTP CDHF data.  
All data except 20,000 blocks of 101,598,511 blocks were written within 4 days.  
The longest time took 13.16 days; Outstanding.

Metric 8: Media monitoring  
Fifty samples scheduled for monitoring. Fifty-seven were sampled; 114% of goal reached; Outstanding.

Metric 9: Media Replacement  
Five hundred units were scheduled for replacement; 1,308 were replaced;  
261.6% of goal reached; Outstanding.

Metric 10: Transition of Initial Archive to Plan  
Five hundred units were scheduled for transition; 1,308 were transitioned;  
261.6% of goal reached; Outstanding.

Metric 11: Reserved.

Metric 11A: Environmental Monitoring  
Equipment calibrated and charts and equipment maintained; records kept;  
Government informed of environmental temperature and humidity problems.  
This was accomplished; Outstanding.

Metric 11B: Security Monitoring  
All goals achieved; Outstanding.

Metric 12: CD-ROM and Off-the-shelf Requests  
222 of 223 requests completed within two days (99.55%), all within 5 days;  
Outstanding.

Metric 13: Requests for Photos and Other Replicable Media  
343 of 344 requests (99.71%) completed in 3 days or less; all within 7 days or  
less; Outstanding.

Metric 14: Accuracy of Request Services  
Strictly manually entered.  
1,874 of 1,874 OK; 100%; Outstanding.

Metric 15: User Satisfaction Level  
Strictly manually entered.  
One dissatisfied requester out of 963 (99.90%); Outstanding.  
The problem was subsequently resolved.

#### Work Element 430 - Work Element #3: Information Systems Operations

Metric 16: Appropriate Databases Populated with Acquired Information  
Strictly manually entered.  
All months took no longer than an average of 0.13 days; Outstanding.

Metric 17: All Information Databases Accessible and Fully Usable  
Available 100% each month; Outstanding.

Metric 18: Database Complaints Logged and Resolution Tracked  
No activity.

Metric 19: Reserved

Metric 19A: One FILX report prepared and disseminated on time;  
Outstanding.

Metric 19B: SATX report prepared and disseminated 12 days late; Failing.

Metric 19C: SPACEWARN reports prepared and delivered by the first of each month; on time; Outstanding.

Metric 19D: NSSDC Newsletter: Delivery schedule met (9 days, both times in this period); Outstanding.

#### Work Element 440 - Work Element #4: Computer System Operations

Metric 20: Maximize Availability of Computing Systems  
In no month did the availability fall below 99.93%; Outstanding.

Metric 21: Security Breaches Minimized  
No Security breaches; Outstanding.

Metric 22: Implement CCB-Approved Changes and Installations  
No activity.

#### Work Element 450 - Work Element #5: ROSAT Data Operations

Metric 23: Install and test ROSAT software/calibration upgrades provided by MPI  
No new software received.

Metric 24: Report any problems from M23 to ROSAT GOF/MPI/SAO  
No problems to report.

Metric 25: Implement M23 as part of standard ROSAT data processing  
No implementations.

Metric 26: Pipeline Testing/Validation  
No activity.

Metric 27: Data products and intermediate data files provided to members of the USRSDC  
No Activity.

Metric 28: Trend data and other data files distributed to members of the USRSDC  
Three months with activity; all data and files distributed in less than one day; Outstanding.

Metric 29: Response to communications from outside individuals  
Responded to communications each month, all within four hours; Outstanding.

Metric 30: Generation and delivery of high-quality ROSAT data products to GO's and HEASARC (averaged over three months)

No activity; no new data received.

Metric 31: ROSAT standard data processing results supplied to the ROSAT GOF/HEASARC

No activity; no new data received.

Metric 32: Reprocessing of ROSAT data

No activity; no such requests received.

Work Element 460: Work Element #6: ASCA Data Operations

NOTE: Task ended September, 2000.

Metric 33: Install and test ASCA software/calibration upgrades provided by the ASCA GOF

No activity.

Metric 34: Report any problems from M33 to the ASCO GOF

No activity.

Metric 35: Implement M33 as part of standard ASCO data processing

No activity.

Metric 36: Pipeline Testing/Validation

Three months with Pipeline producing correct data on first attempt (versions 8.0.1, 8.0.2, 8.0.3, 8.0.4, 8.0.5, and 8.0.8): Outstanding.

Metric 37: Response to communications from outside individuals

All communications were responded to within one day: Outstanding.

Metric 38: Generation and delivery of high-quality ASCA data products to GO's and HEASARC (averaged over three months) for 80% of new observations within 15 work days of receipt of the ASCA raw telemetry from ISAS as averaged over a period of three months.

No activity.

Metric 39: ASCA standard data processing results supplied to the ASCA GOF/HEASARC for 80% of all new observations received from ISAS within 16 work days of receipt of the ASCA raw telemetry from ISAS as averaged over a 3 month interval.

The average was 100 percent for every month: Outstanding.

Metric 40: Reprocessing of ASCA data

No activity; no such requests received.

Work Element 470: Work Element #7: Electronic Handbooks

NOTE: This metric was discontinued in September, 2000.

Metric 41: No work order was requested for this metric.

Metric 42: The Contractor shall maximize the availability of EHB systems:  
Every month had 100% availability; Outstanding.

Metric 43: On-time Delivery of Requested EDCATS Modifications  
No activity.

Work Element 400: Data Systems Development

Metric 44: Deliveries due within 95% of schedule for outstanding, 105% for passing, later than that, failing.

AR 11, Data Migration 1, was given a passing rating (0.8) - delivered September 14, 2000, (17 scheduled workdays);

AR 11, Data Migration 2, was given a failing rating - not delivered as of November 30;

AR 11, DIOnAS Manual Taping, was given a passing rating (0.8) - completed August 21, 2000 (56 scheduled workdays);

AR 11, DIOnAS Automated Taping, was given a passing rating (0.8) - delivered November 30, 2000 (68 scheduled workdays);

AR 13, DIOnAS IMAGE Design Review, was given a passing rating (0.8) - delivered September 29, 2000 (28 scheduled workdays).

Given each AR's weight, a score for M44 of 0.681712 was achieved.

End of PBC Evaluations for the period ending November 2000 (inclusive).

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771



Reply to Attn of:

216

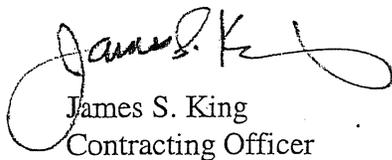
August 17, 2001

Raytheon STX Corporation  
Attn: Ms. Wanda Neal  
4400 Forbes Boulevard  
Lanham, MD 20706

Subject: Contract NAS5-98156, Technical Incentive Fee Evaluation Period No. 5

A technical evaluation of your company's performance for the period 12/1/00 through 5/31/01 was conducted in accordance with Clause G.14 "Contract Fee Structure" contained in the subject contract. As indicated in the enclosed memorandum, this evaluation determined that your company has earned 99.22% of the ~~\$64,694~~ in available technical incentive fee for this period. This results in an earned technical incentive fee of \$64,187. Please submit an invoice to this office for the earned amount. The invoice should state that it results from payment of Period 5 earned technical incentive fee. set

If you have any questions, I can be reached at 301-286-6993.

  
James S. King  
Contracting Officer

Enclosure

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771



Reply to Attn of: 633

July 31, 2001

TO: 216/Contracting Officer/Mr. James S. King  
FROM: 633/NSSDC/George Fleming  
SUBJECT: PBC Evaluation of NAS5-98156 for December 2000 to May 2001

I have reviewed the Performance Based Metrics (PBC) scores for Contract NAS5-98156 for the evaluation period of December 2000 through May 2001, inclusive.

I have conducted an inspection of the raw numbers used in the Raytheon SSDOO Technical Incentive Fee Report; reviewed the mechanisms used to produce the raw and final numbers; and have reviewed these numbers with responsible Government staff. While some numbers are input manually at one time or other, I am confident that they accurately reflect Raytheon's performance, as measured by the PBC standards in the Contract.

The contractor has performed at an exceptional level. The technical incentive fee percentage is calculated as follows:

Work Element	Unweighted Score	Weight	Weighted Score
1.1 Metrics Tracking System	1	10	10
1.2 NSSDC Data operations	1	40	40
1.3 Information Systems Operations	1	10	10
1.4 Computer System Operations	1	20	20
1.5 ROSAT Science Data Processing & Mgmt.	N/A	N/A	0
1.6 ASCA Science Data Processing & Mgmt.	N/A	N/A	0
1.7 Electronic Handbooks	N/A	N/A	0
1.8 Data Systems Development	.9608434	20	19.2169
Final Percentage		100	99.2169

  
George Fleming

cc: 630/Dr. Green  
630/Ms. Laubenthal  
633/Dr. King

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771  
Work Element 400  
No Metrics



Reply to Attn of: Work Element 410 - Work Element 1: Metrics Tracking  
Evaluated by inspection.

Metric 1: Reserved

Metric 2: Database Maintained Current

The metric states "No information more than 2 working days after the end of the month". The system was updated within 2 working days of the end of each month. Outstanding.

Work Element 420 - Work Element #2: NSSDC Data Operations

Metric 3: NDADS-destined electronic data are ingested  
38,103 of 38,184 files (99.79%) ingested within one day or less; Outstanding.

Metric 4: ISTP Key Parameter and Related Data  
28,197 of 28,197 files processed within 1 day (100%); Outstanding.

Metric 5: Longest Interval between arrival and complete NDADS processing  
Calculation automatically made from M3.  
Longest interval was 0.28 days; Outstanding.

Metric 6: NDADS Ingested Data (Physically Received)  
Performed manually.  
However, no such data physically received.

Metric 7: Data Written to Backup Media Within 4 Days of Arrival  
Note: The Government certifies that this metric does not apply to ISTP CDHF  
data.

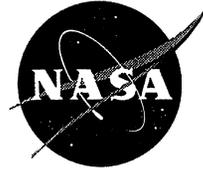
No activity

Metric 8: Media monitoring  
Fifty-two samples scheduled for monitoring. Fifty-seven were sampled; 110% of  
goal reached; Outstanding.

Metric 9: Media Replacement  
Five hundred and twelve units were scheduled for replacement; 512 were  
replaced; 100% of goal reached; Outstanding.

Metric 10: Transition of Initial Archive to Plan  
Five hundred and twelve units were scheduled for transition; 512 units were  
transitioned; 100% of goal reached; Outstanding.

Metric 11: Reserved.



Metric 11A: Environmental Monitoring  
Equipment calibrated and charts and equipment maintained; records kept;  
Government informed of environmental temperature and humidity problems.  
This was accomplished; Outstanding.

Metric 11B: Security Monitoring  
All goals achieved; Outstanding.

Metric 12: CD-ROM and Off-the-shelf Requests  
237 of 237 requests completed within two days; Outstanding.

Metric 13: Requests for Photos and Other Replicable Media  
293 of 294 requests (99.66%) completed in 3 days or less; all within 7 days or less;  
Outstanding.

Metric 14: Accuracy of Request Services  
Strictly manually entered.  
774 of 774 OK; 100%; Outstanding.

Metric 15: User Satisfaction Level  
Strictly manually entered.  
No dissatisfied requesters out of 1357 (100%); Outstanding.

#### Work Element 430 - Work Element #3: Information Systems Operations

Metric 16: Appropriate Databases Populated with Acquired Information  
Strictly manually entered.  
All months took no longer than an average of 0.12 days; Outstanding.

Metric 17: All Information Databases Accessible and Fully Usable  
Available 100% each month; Outstanding.

Metric 18: Database Complaints Logged and Resolution Tracked  
All problems fixed in less than one day; Outstanding.

Metric 19: Reserved

Metric 19A: One FILX report prepared and disseminated on time; Outstanding.

Metric 19B: SATX report prepared by May 1; Outstanding.

Metric 19C: SPACEWARN reports prepared and delivered by the first of each  
month; on time; Outstanding.

Metric 19D: NSSDC Newsletter: Delivery schedule met (in 8 and 7 days);  
Outstanding.



Work Element 440 - Work Element #4: Computer System Operations

Metric 20: Maximize Availability of Computing Systems  
In no month did the availability fall below 99.71%; Outstanding.

Metric 21: Security Breaches Minimized  
No Security breaches; Outstanding.

Metric 22: Implement CCB-Approved Changes and Installations  
No activity.

Reply to Attn of:

Work Element 450 - Work Element #5: ROSAT Data Operations

Reserved.

Work Element 460: Work Element #6: ASCA Data Operations

Reserved.

Work Element 470: Work Element #7: Electronic Handbooks

Reserved.

Work Element 400: Data Systems Development

Metric 44: Deliveries due within 95% of schedule for outstanding, 105% for passing, later than that, failing.

AR 13 (1/31/2001): Read 45 Cygnet platter sides and write to DLT.  
Weight: 1; Scheduled: 60 work days; Actual: 54 days; Outstanding.

AR 13, Read 49 Cygnet platters' worth of data from DLT to RAID/DLT through DIONAS.  
Weight: 1; Scheduled: 60 work days; Actual: 57 days; Outstanding.

AR 13, Modify the DIONAS software to handle the delivery of IMAGE AIPs and replacement IMAGE AIPs.  
Weight: 1; Scheduled: 82 work days; Actual: 76 days; Outstanding.

AR 13, Read 58 Cygnet platter sides and write to DLT.  
Weight: 1; Scheduled: 65 days; Actual: 60 days; Outstanding.

AR 13, Migrate 73 platters' worth of data from DLT to RAID/DLT through DIONAS.  
Weight: 1; Scheduled: 65 work days; Actual: 80% on-time at end of review period; Passing.

Given each AR's weight, a score for M44 of 0.681712 was achieved.

National Aeronautics and  
Space Administration

**Goddard Space Flight Center**

Greenbelt, MD 20771

End of PBC Evaluations for the period ending May 2001 (inclusive).



Reply to Attn of:

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771



Reply to Attn of:

216

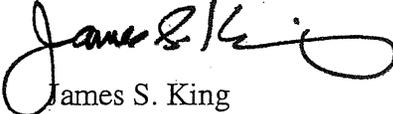
December 21, 2001

Raytheon STX Corporation  
Attn: Ms. Julie Smith  
4400 Forbes Boulevard  
Lanham, MD 20706

Subject: Contract NAS5-98156, Technical Incentive Fee Evaluation Period No. 6

A technical evaluation of your company's performance for the period 6/1/01 through 11/30/01 was conducted in accordance with Clause G.14 "Contract Fee Structure" contained in the subject contract. As indicated in the enclosed memorandum, this evaluation determined that your company has earned 92.5% of the \$64,694 in available technical incentive fee for this period. This results in an earned technical incentive fee of \$59,842. Please submit an invoice to this office for the earned amount. The invoice should state that it is for payment of Period 6 earned technical incentive fee.

If you have any questions, I can be reached at 301-286-6993.

  
James S. King  
Contracting Officer

Enclosure

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771

\$76,987.25  
1,055 2/15/01  
12,293.56



December 19, 2001

Reply to Attn of: 633

TO: 216/Contracting Officer/James S. King  
FROM: 633/NSSDC/David Han DBH  
SUBJECT: PBC Evaluation of NAS5-98156 for June 2001 through November 2001

I have reviewed the Performance Based Metrics (PBC) scores for Contract NAS5-98156 for the evaluation period of June 2001 through November 2001, inclusive.

I have conducted an inspection of the raw numbers used in the Raytheon SSDOO Technical Incentive Fee Report; reviewed the mechanisms used to produce the raw and final numbers; and have reviewed these numbers with responsible Government staff. While some numbers are input manually at one time or other, I am confident that they accurately reflect Raytheon's performance, as measured by the PBC standards in the Contract.

The contractor has performed at an exceptional level. The technical incentive fee percentage is calculated as follows:

Work Element	Unweighted Score	Weight	Weighted Score
400 - Data Systems Development (M44)	1	20	20
410 - Metrics Tracking System (M2)	1	10	10
420 - NSSDC Data operations (M3-M15)	0.9652	40	38.6087
430 - Information Systems Operations (M16-M19)	0.9895	10	9.8950
440 - Computer System Operations (M20-M22)	0.7	20	14
450 - ROSAT Science Data Processing & Mgmt.	N/A	N/A	0
460 - ASCA Science Data Processing & Mgmt.	N/A	N/A	0
470 - Electronic Handbooks	N/A	N/A	0
Final Percentage		100	92.5037

cc:  
630/Dr. Green  
630/Ms. Laubenthal  
633/Dr. King

Work Element 400 - Data Systems Development

Metric 44: Deliveries due within 95% of schedule - outstanding  
Within 105% of schedule - passing  
Later than passing - failing.

AR 44-16: Shutdown PBC equipment in Building 28/S100

Weight: 1; Scheduled: 25 work days; Actual: 20 days; Outstanding.

Given each AR's weight, a score of 1.0 was achieved.

Work Element 410 - Metrics Tracking

Evaluated by inspection.

Metric 1: Reserved

Metric 2: Database Maintained Current

No information > 2 working days after the end of the month - outstanding  
No information > 4 working days after the end of the month - passing  
Less than passing performance - failing

The system was updated within 2 working days of the end of each month;  
Outstanding.

Work Element 420 - NSSDC Data Operations

Metric 3: Ingest of electronic data into DIONAS

98% of files within 1 working day of arrival - outstanding  
90% of files within 1 day and 98% within 2 days - passing  
Less than passing performance - failing

117,591 of 119,306 files (98.56%) ingested within one day or less;  
Outstanding.

Metric 4: ISTP Key Parameter and Related Data

98% of files within 1 working day of arrival - outstanding  
90% of files within 1 day and 98% within 2 days - passing  
Less than passing performance - failing

24,800 of 24,800 files (100%) processed within 1 day; Outstanding.

Metric 5: Longest Interval between arrival and completion of DIONAS processing  
< 2 days - outstanding, < 5 days - passing, > 5 days - failing

Longest interval was 4.13 days (October); Passing.

Metric 6: Ingest of physically received data into DIONAS within 4 days of arrival

At least 98% of files - outstanding  
At least 90% of files - passing  
Less than passing performance - failing

**No activity**

Metric 7: Data (electronic and physical media) written to backup media within 4 days of arrival

At least 98% of files – outstanding

At least 90% of files – passing

Less than passing performance – failing

1,244,607 of 1,244,607 blocks written to permanent archive media (100%);

Outstanding

**Note:** The Government certifies that this metric does not apply to ISTP CDHF data.

Metric 8: Media monitoring (for deterioration)

Sampling of 10% more than planned - outstanding

Sampling of within 10% of planned - passing

Less than passing performance – failing

Fifty samples scheduled for monitoring in November. Fifty-seven were sampled; 114% of goal reached; Outstanding.

Metric 9: Media replacement

Conform to plan schedule to within 2 % - outstanding

Conform to plan schedule to within 10 % - passing

Less than passing performance – failing

Five hundred units were scheduled for replacement in November; 525 were replaced; 105% of goal reached; Outstanding.

Metric 10: Transition of initial archive to plan

More than 10% faster than called for in plan – outstanding

Within 10% of planned schedule – passing

Less than passing performance – failing

Five hundred units were scheduled for transition in November; 525 units were transitioned; 105% of goal reached; Outstanding.

Metric 11: Reserved.

Metric 11A: Environmental monitoring

Equipment calibrated and charts and equipment maintained; records kept;

Government informed of environmental temperature and humidity problems. This was accomplished; Outstanding.

Metric 11B: Security monitoring

Provided in-person coverage of the library; secured the library; executed sign-out/sign-in SOP; maintained the off-line storage inventory; provided a report of off-line storage inventory. All goals achieved; Outstanding.

Metric 12: CD-ROM and other off-the-shelf items (e.g. posters) requests  
> 95% of requests mailed out within 2 days - outstanding  
> 95% of requests mailed out within 5 days - passing  
> 5% of requests take longer than 5 days - failing

169 of 169 requests (100%) completed within 2 days; Outstanding.

Metric 13: Requests for photos and other replicable media  
Less than 3 days for >95% of requests – outstanding  
Less than 7 days for >95% of requests – passing  
Longer than 5 days for >5% of requests – failing

236 of 236 requests (100%) completed in 3 days or less; Outstanding.

**Note:** The criteria reflects the elapsed time between request receipt and order mailing, excluding time at photo facility outside NSSDC

Metric 14: Accuracy of request services  
Number of reports of non-receipt of requested data and supporting materials (manually entered):  
0 – outstanding  
Less than 1 report/month – passing  
Greater than 1 report/month – failing

No reports received out of 415 shipments (100%); Outstanding.

Metric 15: User satisfaction level  
> 98% of users are satisfied - outstanding  
> 90% of users are satisfied - passing  
< 90% of users are satisfied – failing

No dissatisfied requesters out of 1,453 (100%); Outstanding.

#### Work Element 430 - Information Systems Operations

Metric 16: Appropriate databases populated with acquired information  
Within an average of 1 working day of receipt – outstanding  
Within an average of less than 5 working days – passing  
Greater than 5 working days – failing

All months took no longer than an average of 0.13 days; Outstanding.

Metric 17: All information databases are accessible and fully usable  
More than 99% of the time – outstanding  
97-99% of the time – passing  
< 97% of the time – failing

Availability - 99.5%; Outstanding.

Metric 18: Database complaints logged and resolution tracked  
Within an average of 1 working day of receipt – outstanding  
Within an average of less than 5 working days – passing  
Greater than 5 working days – failing

All problems resolved in less than one day except July (1.6 days).  
No complaints received for September, October, and November.  
On average, it took 1.07 days to resolve complaints; Passing.

Metric 19: Reserved

Metric 19A: One FILX report prepared and disseminated on time; Outstanding.

Metric 19B: SATX report prepared and disseminated on time; Outstanding.

Metric 19C: SPACEWARN reports prepared and delivered by the first of each month; on time; Outstanding.

Metric 19D: NSSDC Newsletter: Delivery schedule met (in 8 and 9 days); Outstanding.

#### Work Element 440 - Computer System Operations

Metric 20: Maximize availability of computing systems  
Availability of at least 99% - outstanding  
Availability of at least 98% - passing  
Availability of less than 98% - failing

All months except July (96.87%) had the availability above 99.95%.  
Average availability for the evaluation period was 99.46%; Outstanding.

Metric 21: Security Breaches Minimized  
Number of major incidents during the evaluation period are:  
0 – outstanding  
1 – passing  
More than 1 – failing

No security breaches; Outstanding.

Metric 22: Implement CCB-approved changes and installations  
End PBC use of HS241 – not completed within 1 day of the 11/30 completion date; Failing.

#### Work Element 450 - ROSAT Data Operations

Reserved.

#### Work Element 460 - ASCA Data Operations

Reserved.

Work Element 470 - Electronic Handbooks

Reserved.

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771



Reply to Attn of:

216

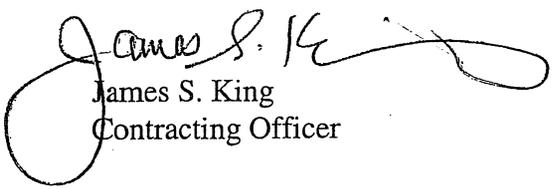
August 6, 2002

Raytheon STX Corporation  
Attn: Ms. Julie Smith  
4400 Forbes Boulevard  
Lanham, MD 20706

Subject: Contract NAS5-98156, Technical Incentive Fee Evaluation Period No. 7

A technical evaluation of your company's performance for the period 12/1/01 through 5/31/02 was conducted in accordance with Clause G.14 "Contract Fee Structure" contained in the subject contract. As indicated in the enclosed memorandum, this evaluation determined that your company has earned 99% of the \$61,726 in available technical incentive fee for this period. This results in an earned technical incentive fee of \$61,109. Please submit an invoice to this office for the earned amount. The invoice should state that it is for payment of *Period 7 earned technical incentive fee*.

If you have any questions, I can be reached at 301-286-6993.

  
James S. King  
Contracting Officer

Enclosure

---

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Greenbelt, MD 20771



August 5, 2002

Reply to Attn of: 633

TO: 216/Contracting Officer  
Attn: Mr. James S. King

FROM: 633/NSSDC/David Han

SUBJECT: PBC Evaluation of NAS5-98156 for December 2001 through May 2002

I have reviewed the Performance Based Metrics (PBC) scores for Contract NAS5-98156 for the evaluation period of December 2001 through May 2002, inclusive.

I have conducted an inspection of the raw numbers used in the Raytheon SSDOO Technical Incentive Fee Report; reviewed the mechanisms used to produce the raw and final numbers; and have reviewed these numbers with responsible Government staff. While some numbers are input manually at one time or other, I am confident that they accurately reflect Raytheon's performance, as measured by the PBC standards in the Contract.

The contractor has performed at an exceptional level. The technical incentive fee percentage is calculated as follows:

Work Element	Unweighted Score	Weight	Weighted Score
400 - Data Systems Development (M44)	1	20	20
410 - Metrics Tracking System (M2)	1	10	10
420 - NSSDC Data operations (M3-M15)	0.98571	40	39.4284
430 - Information Systems Operations (M16-M19)	0.95714	10	9.5714
440 - Computer System Operations (M20-M22)	1	20	20
450 - ROSAT Science Data Processing & Mgmt.	N/A	N/A	0
460 - ASCA Science Data Processing & Mgmt.	N/A	N/A	0
470 - Electronic Handbooks	N/A	N/A	0
Final Percentage		100	98.9998

David Han

A handwritten signature in black ink, appearing to read "David Han".

8/5/02

cc:

630/Dr. Green  
630/Ms. Laubenthal  
633/Dr. King

Work Element 400 - Data Systems Development

Metric 44: Deliveries due within 95% of schedule - outstanding  
Within 105% of schedule – passing  
Later than passing - failing.

AR 44-17: Eliminate DIONAS viewable passwords  
Weight: 1; Scheduled: 17 work days; Actual: 11 days; Outstanding.

AR 44-18: Design database mods to track predecessors/successor data files  
Weight: 1; Scheduled: 37 work days; Actual: 35 days; Outstanding.

AR 44-20: Implement database mods for pred/succ  
Weight: 1; Scheduled: 25 work days; Actual: 23 days; Outstanding.

Given each AR's weight, a score of 1.0 was achieved.

Work Element 410 - Metrics Tracking

Evaluated by inspection.

Metric 1: Reserved

Metric 2: Database Maintained Current

No information > 2 working days after the end of the month - outstanding  
No information > 4 working days after the end of the month – passing  
Less than passing performance – failing

The system was updated within 2 working days of the end of each month;  
Outstanding.

Work Element 420 - NSSDC Data Operations

Metric 3: Ingest of electronic data into DIONAS

~~98% of files within 1 working day of arrival – outstanding~~  
90% of files within 1 day and 98% within 2 days – passing  
Less than passing performance – failing

120,218 of 121,871 files (98.64%) ingested within one day or less; Outstanding.

Metric 4: ISTP Key Parameter and Related Data

98% of files within 1 working day of arrival – outstanding  
90% of files within 1 day and 98% within 2 days – passing  
Less than passing performance – failing

9,133 of 9,133 files (100%) processed within 1 day; Outstanding.

Metric 5: Longest Interval between arrival and completion of DIONAS processing  
< 2 days – outstanding, < 5 days – passing, > 5 days – failing

Longest interval was 3.01 days (March); Passing

Metric 6: Ingest of physically received data into DIONAS within 4 days of arrival  
At least 98% of files – outstanding  
At least 90% of files – passing  
Less than passing performance – failing

No activity

Metric 7: Data (electronic and physical media) written to backup media within 4 days of arrival

At least 98% of files – outstanding  
At least 90% of files – passing  
Less than passing performance – failing

No activity

**Note:** The Government certifies that this metric does not apply to ISTP CDHF data.

Metric 8: Media monitoring (for deterioration)  
Sampling of 10% more than planned - outstanding  
Sampling of within 10% of planned - passing  
Less than passing performance – failing

Fifty samples scheduled for monitoring in November. Eighty six were sampled;  
172% of goal reached; Outstanding.

Metric 9: Media replacement  
~~Conform to plan schedule to within 2 % - outstanding~~  
~~Conform to plan schedule to within 10 % - passing~~  
~~Less than passing performance – failing~~

No activity

Metric 10: Transition of initial archive to plan  
More than 10% faster than called for in plan – outstanding  
Within 10% of planned schedule – passing  
Less than passing performance – failing

No activity

Metric 11: Reserved (not used after December, 1999)

Metric 11A: Environmental monitoring

Equipment calibrated and charts and equipment maintained; records kept;  
Government informed of environmental temperature and humidity problems. This  
was accomplished; Outstanding.

Metric 11B: Security monitoring

Provided in-person coverage of the library; secured the library; executed sign-  
out/sign-in SOP; maintained the off-line storage inventory; provided a report of off-  
line storage inventory. All goals achieved; Outstanding.

Metric 12: CD-ROM and other off-the-shelf items (e.g. posters) requests

> 95% of requests mailed out within 2 days - outstanding  
> 95% of requests mailed out within 5 days - passing  
> 5% of requests take longer than 5 days - failing

181 of 181 requests (100%) completed within 2 days; Outstanding.

Metric 13: Requests for photos and other replicable media

Less than 3 days for >95% of requests – outstanding  
Less than 7 days for >95% of requests – passing  
Longer than 5 days for >5% of requests – failing

217 of 217 requests (100%) completed in 3 days or less; Outstanding.

**Note:** The criteria reflects the elapsed time between request receipt and order  
mailing, excluding time at photo facility outside NSSDC

Metric 14: Accuracy of request services

Number of reports of non-receipt of requested data and supporting materials  
(manually entered):

0 – outstanding  
Less than 1 report/month – passing  
Greater than 1 report/month – failing

No reports received out of 409 shipments (100%); Outstanding.

Metric 15: User satisfaction level

> 98% of users are satisfied - outstanding  
> 90% of users are satisfied - passing  
< 90% of users are satisfied – failing

No dissatisfied requesters out of 380 (100%); Outstanding.

## Work Element 430 - Information Systems Operations

Metric 16: Appropriate databases populated with acquired information  
Within an average of 1 working day of receipt – outstanding  
Within an average of less than 5 working days – passing  
Greater than 5 working days – failing

All months took no longer than an average of 0.18 days; Outstanding.

Metric 17: All information databases are accessible and fully usable  
More than 99% of the time – outstanding  
97-99% of the time – passing  
< 97% of the time – failing

Availability - 99.83%; Outstanding.

Metric 18: Database complaints logged and resolution tracked  
Within an average of 1 working day of receipt – outstanding  
Within an average of less than 5 working days – passing  
Greater than 5 working days – failing

All problems resolved in 3 days for December, 2001.  
No complaints received for January through May 2002.  
On average, it took 3 days to resolve complaints; Passing.

Metric 19: Not used after December, 1999

Metric 19A: One FILX report prepared and disseminated on time; Outstanding.

Metric 19B: SATX report prepared and disseminated on time; Outstanding.

Metric 19C: SPACEWARN reports prepared and delivered by the first of each month; on time; Outstanding.

Metric 19D: NSSDC Newsletter: Not Applicable

## Work Element 440 - Computer System Operations

Metric 20: Maximize availability of computing systems  
Availability of at least 99% - outstanding  
Availability of at least 98% - passing  
Availability of less than 98% - failing

All months had the availability above 99.95%.  
Average availability for the evaluation period was 99.98%; Outstanding.

Metric 21: Security Breaches Minimized

Number of major incidents during the evaluation period are:

0 – outstanding

1 – passing

More than 1 – failing

No security breaches; Outstanding.

Metric 22: Implement CCB-approved changes and installations

Performed 2 requests in May 2002.

Both completed early; Outstanding.

Work Element 450 - ROSAT Data Operations

Reserved (task ended January 2001).

Work Element 460 - ASCA Data Operations

Reserved (task ended September 2000).

Work Element 470 - Electronic Handbooks

Reserved (task ended September 2000).

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National Aeronautics and  
Space Administration

**Goddard Space Flight Center**  
Greenbelt, MD 20771



Reply to Attn of:

210.8

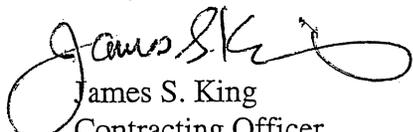
January 24, 2003 (Revised)

Raytheon STX Corporation  
Attn: Ms. Julie Smith  
4400 Forbes Boulevard  
Lanham, MD 20706

Subject: Contract NAS5-98156, Technical Incentive Fee Evaluation Period No. 8

A technical evaluation of your company's performance for the period 6/1/02 through 11/30/02 was conducted in accordance with Clause G.14 "Contract Fee Structure" contained in the subject contract. As indicated in the enclosed memorandum, this evaluation determined that your company has earned 98% of the \$61,726 in available technical incentive fee for this period. This results in an earned technical incentive fee of \$60,491. Please submit an invoice to this office for the earned amount. The invoice should state that it is for payment of *Period 8 earned technical incentive fee*.

If you have any questions, I can be reached at 301-286-6993.

  
James S. King  
Contracting Officer

Enclosure

January 24, 2003

633

TO: 216/Contracting Officer  
Attn: Mr. James S. King

FROM: 633/NSSDC/David Han

SUBJECT: PBC Evaluation of NAS5-98156 for June 2002 through November 2002

I have reviewed the Performance Based Metrics (PBC) scores for Contract NAS5-98156 for the evaluation period of June 2002 through November 2002, inclusive.

I have conducted an inspection of the raw numbers used in the Raytheon SSDOO Technical Incentive Fee Report; reviewed the mechanisms used to produce the raw and final numbers; and have reviewed these numbers with responsible Government staff. While some numbers are input manually at one time or other, I am confident that they accurately reflect Raytheon's performance, as measured by the PBC standards in the Contract.

The contractor has performed at an exceptional level. The technical incentive fee percentage is calculated as follows:

Work Element	Unweighted Score	Weight	Weighted Score
400 - Data Systems Development (M44)	1	20	20
410 - Metrics Tracking System (M2)	1	10	10
420 - NSSDC Data operations (M3-M15)	0.97000	40	38.8000
430 - Information Systems Operations (M16-M19)	0.92857	10	9.2857
440 - Computer System Operations (M20-M22)	1	20	20
450 - ROSAT Science Data Processing & Mgmt.	N/A	N/A	0
460 - ASCA Science Data Processing & Mgmt.	N/A	N/A	0
470 - Electronic Handbooks	N/A	N/A	0
Final Percentage		100	98.0857

*was 90.1429*

David Han

cc:  
630/Dr. Green  
630/Ms. Laubenthal  
633/Mr. Sawyer

Work Element 400 - Data Systems Development

Metric 44: Deliveries due within 95% of schedule - outstanding  
Within 105% of schedule – passing  
Later than passing - failing.

AR 44-20: Develop temporary AIP retrieval tool  
Weight: 1; Scheduled: 40 work days (6/14 – 8/9/02)  
Actual: 38 days (completed on 8/7/02); Outstanding

AR 44-21: Track QUAL\_STAT codes in DIONAS database  
Weight: 1; Scheduled: 20 work days (7/11 – 8/7/02)  
Actual: 18 days (completed on 8/5/02); Outstanding

AR 44-22: Separate DIONAS job creation and job run functions  
Weight: 1; Scheduled: 55 work days (8/27 – 11/14/02)  
Actual: 48 days (completed on 11/7/02); Outstanding

Given each AR's weight, a score of 1.0 was achieved.

Work Element 410 - Metrics Tracking

Evaluated by inspection.

Metric 1: Reserved

Metric 2: Database Maintained Current

No information > 2 working days after the end of the month - outstanding  
No information > 4 working days after the end of the month – passing  
Less than passing performance – failing

The system was updated within 2 working days of the end of each month;  
Outstanding.

Work Element 420 - NSSDC Data Operations

Metric 3: Ingest of electronic data into DIONAS

98% of files within 1 working day of arrival – outstanding  
90% of files within 1 day and 98% within 2 days – passing  
Less than passing performance – failing

92,567 of 94,892 files (97.55%) ingested within 2 days or less; Failing

Metric 4: ISTP Key Parameter and Related Data (not used after September, 2002)

98% of files within 1 working day of arrival – outstanding  
90% of files within 1 day and 98% within 2 days – passing  
Less than passing performance – failing

4,842 of 4,842 files (100%) processed within 1 day; Outstanding.

Metric 5: Longest Interval between arrival and completion of DIONAS processing  
< 2 days – outstanding, < 5 days – passing, > 5 days – failing

Longest interval was 3.15 days (June); Passing

Metric 6: Ingest of physically received data into DIONAS within 4 days of arrival  
At least 98% of files – outstanding  
At least 90% of files – passing  
Less than passing performance – failing

No activity

Metric 7: Data (electronic and physical media) written to backup media within 4 days of arrival

At least 98% of files – outstanding  
At least 90% of files – passing  
Less than passing performance – failing

No activity

**Note:** The Government certifies that this metric does not apply to ISTP CDHF data.

Metric 8: Media monitoring (for deterioration)  
Sampling of 10% more than planned - outstanding  
Sampling of within 10% of planned - passing  
Less than passing performance – failing

Fifty samples scheduled for monitoring in November. 159 were sampled; 318% of goal reached; Outstanding.

Metric 9: Media replacement  
Conform to plan schedule to within 2 % - outstanding  
Conform to plan schedule to within 10 % - passing  
Less than passing performance – failing

No activity

Metric 10: Transition of initial archive to plan  
More than 10% faster than called for in plan – outstanding  
Within 10% of planned schedule – passing  
Less than passing performance – failing

No activity

Metric 11: Reserved (not used after December, 1999)

Metric 11A: Environmental monitoring

Equipment calibrated and charts and equipment maintained; records kept;  
Government informed of environmental temperature and humidity problems. This  
was accomplished; Outstanding.

Metric 11B: Security monitoring

Provided in-person coverage of the library; secured the library; executed sign-  
out/sign-in SOP; maintained the off-line storage inventory; provided a report of  
off-line storage inventory. All goals achieved; Outstanding.

Metric 12: CD-ROM and other off-the-shelf items (e.g. posters) requests

> 95% of requests mailed out within 2 days - outstanding

> 95% of requests mailed out within 5 days - passing

> 5% of requests take longer than 5 days - failing

145 of 145 requests (100%) completed within 2 days; Outstanding.

Metric 13: Requests for photos and other replicable media

Less than 3 days for >95% of requests – outstanding

Less than 7 days for >95% of requests – passing

Longer than 5 days for >5% of requests – failing

126 of 126 requests (100%) completed in 3 days or less; Outstanding.

**Note:** The criteria reflects the elapsed time between request receipt and order  
mailing, excluding time at photo facility outside NSSDC

Metric 14: Accuracy of request services

Number of reports of non-receipt of requested data and supporting materials  
(manually entered):

0 – outstanding

Less than 1 report/month – passing

Greater than 1 report/month – failing

No reports received out of 262 shipments (100%); Outstanding.

Metric 15: User satisfaction level

> 98% of users are satisfied - outstanding

> 90% of users are satisfied - passing

< 90% of users are satisfied – failing

No dissatisfied requesters out of 264 (100%); Outstanding.

## Work Element 430 - Information Systems Operations

Metric 16: Appropriate databases populated with acquired information  
Within an average of 1 working day of receipt – outstanding  
Within an average of less than 5 working days – passing  
Greater than 5 working days – failing

All months took no longer than an average of 0.25 days; Outstanding.

Metric 17: All information databases are accessible and fully usable  
More than 99% of the time – outstanding  
97-99% of the time – passing  
< 97% of the time – failing

Availability - 100%; Outstanding.

Metric 18: Database complaints logged and resolution tracked  
Within an average of 1 working day of receipt – outstanding  
Within an average of less than 5 working days – passing  
Greater than 5 working days – failing

No complaints received for the following months:  
June, September, and November

On average, it took less than a day to resolve complaints; Outstanding.

Metric 19: Not used after December, 1999

Metric 19A: One FILX report prepared and disseminated on time; Outstanding.

Metric 19B: SATX report prepared and disseminated on time; Failing (8 days late)

Metric 19C: SPACEWARN reports prepared and delivered by the first of each month;  
on time; Outstanding.

Metric 19D: NSSDC Newsletter: Not Applicable

## Work Element 440 - Computer System Operations

Metric 20: Maximize availability of computing systems  
Availability of at least 99% - outstanding  
Availability of at least 98% - passing  
Availability of less than 98% - failing

All months had the availability above 99.82%.  
Average availability for the evaluation period was 99.93%; Outstanding.

**Metric 21: Security Breaches Minimized**

Number of major incidents during the evaluation period are:

0 – outstanding

1 – passing

More than 1 – failing

No security breaches; Outstanding.

**Metric 22: Implement CCB-approved changes and installations**

Performed 3 requests (2 in June and 1 in October).

All requests completed early; Outstanding.

**Work Element 450 - ROSAT Data Operations**

Reserved (task ended January 2001).

**Work Element 460 - ASCA Data Operations**

Reserved (task ended September 2000).

**Work Element 470 - Electronic Handbooks**

Reserved (task ended September 2000).