



UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

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NATIONAL SECURITY AND  
INTERNATIONAL AFFAIRS DIVISION

B-214419 **RESTRICTED** April 3, 1984

**RESTRICTED** - This report is released outside the General  
Accounting Office only on the basis of specific approval  
by the Office of Congressional Relations.

The Honorable William Proxmire  
United States Senate

Dear Senator Proxmire:

Subject: Costs of Government Funded Trips for Invitees  
to Attend Space Shuttle Launches at Kennedy  
Space Center, Florida (GAO/NSIAD-84-77)

On September 19, 1983, you asked us to answer a number of questions concerning the government's practice of inviting and transporting guests at government expense to witness space shuttle launches at the Kennedy Space Center in Florida. (See enc. II.) Based on discussions with your office, it was agreed that we would address the following questions.

- How many individuals were transported to each of the launch events?
- What transportation mode was used in each case and what were the total costs to the U.S. government for this transportation?
- What entertainment, lodging, and collateral expenses were incurred by individuals on these trips which were paid for directly or indirectly by the U.S. government?
- How many National Aeronautics and Space Administration (NASA), Air Force, or other U.S. employees were involved in the planning and execution of these trips and at what cost to the U.S. government?
- From what budgetary accounts is funding for all identifiable U.S. government costs drawn?
- What are NASA's and the Air Force's plans regarding the use of public funded transportation to transport invitees to future launch events? What are the estimated costs for transportation, entertainment, and all associated federal costs through the next 10 launches?

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As agreed with your office, we concentrated our efforts on NASA's guest operations program costs. We did not determine if other government agencies incurred per diem and other expenses for their employees that NASA invited and transported to view shuttle launches.

NASA usually invites several thousand guests to view each of the space shuttle launches at the Kennedy Space Center. Except for local bus transportation, most guests must obtain and pay for their own transportation to the Kennedy Space Center. However, NASA has provided air transportation to the launches for some of its guests. We identified an estimated total of \$1,460,077 that NASA spent on its guest operations program through the ninth space shuttle launch on November 28, 1983. This consisted of (1) \$474,160 for chartered and agency aircraft to transport 2,228 guests, of whom 82 percent were government employees and spouses, between Washington, D.C., and the space shuttle events, (2) \$346,565 in support costs for NASA employees to plan and carry out guest operations, (3) \$17,212 for NASA-sponsored receptions and meals at certain events, (4) \$504,601 for leased buses to provide guests local transportation at the Center and (5) \$117,539 for transportation and expenses to honor NASA employees at shuttle launches as part of its Manned Flight Awareness Program.

We also found that the U.S. Information Agency, the Air Force, and the Postal Service spent \$31,173 related to guests at the space shuttle launches. In addition, contractors paid \$36,165 for receptions as part of the Manned Flight Awareness Program.

NASA officials told us they expect that future guest activity will decrease because most historical firsts have taken place. In March 1984, NASA plans to review the guest operations program concerning future shuttle launches.

A detailed discussion of information obtained is provided in enclosure I.

#### OBJECTIVE, SCOPE, AND METHODOLOGY

To accomplish our objective of developing the information needed to respond to the questions raised, we met with officials from NASA, the Air Force, and selected contractors and obtained a basic understanding of the scope and procedures associated with the guest operations program.

NASA provided us with computerized listings of NASA-invited guests who were transported by NASA to shuttle launches. We

categorized the guests by source of employment. NASA also developed for us, using their best estimates, a list of individuals and associated supporting costs for planning and providing escort services on these trips. As agreed, we did only limited verification of this data. We also reviewed various billing documents and receipts for costs associated with chartered aircraft, ground transportation, and certain reception costs.

We conducted this review from October 1983 to February 1984 in accordance with generally accepted government auditing standards, except we did not request official comments on this report. However, we did discuss a draft of the report with NASA officials and incorporated changes where appropriate.

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We have requested NASA's formal views as to its legal authority to pay for various services provided to invitees to space shuttle launches as well as for certain contractor expenditures as indirect contract costs. These costs are paid from NASA's Research and Program Management and the Research and Development appropriations, respectively. We will examine these issues separately upon receipt of NASA's reply and advise you of the results of our analysis.

As you requested, we do not plan to distribute this report further until 30 days from its issue date, unless you publicly announce its contents earlier.

Sincerely yours,



Frank C. Conahan  
Director

Enclosures - 2

NASA'S GUEST OPERATIONS PERTAINING  
TO SPACE SHUTTLE LAUNCHES

NASA usually invites several thousand guests to view each of the space shuttle launches at the Kennedy Space Center (KSC). Except for local bus transportation, most guests must obtain and pay for their own transportation to KSC. However, NASA has provided air transportation to the launches for some of its guests--from 30 to 416 individuals per shuttle event. Starting with the first attempted shuttle launch on April 10, 1981, through the ninth space transportation system (STS) launch on November 28, 1983, NASA has transported 2,228 guests primarily between Washington, D.C., and KSC. These events included two attempted launches, the first space shuttle landing on April 14, 1981, and nine actual launches. Most of these guests were government employees.

NASA's guest operations program cost \$1,460,077 through the first nine space shuttle launches as follows:

Air transportation	\$ 474,160
Support costs	346,565
Receptions and meals	17,212
Local transportation	504,601
Manned Flight Awareness Program	<u>117,539</u>
Total	<u>\$1,460,077</u>

All NASA-sponsored shuttle guest activities are funded from its Research and Program Management Appropriation and are not broken out any further by legislated budgetary accounts. We have requested NASA's formal views as to its legal authority to fund various services provided to invitees to space shuttle launches.

We also identified additional costs of \$31,173 that were funded by the U.S. Information Agency, the U.S. Postal Service, and the U.S. Air Force. In addition \$36,165 was funded by contractors for receptions as part of the Manned Flight Awareness Program.

NUMBER OF INDIVIDUALS NASA TRANSPORTED  
TO SPACE SHUTTLE EVENTS

NASA has transported a total of 2,228 individuals to and/or from 12 space shuttle events. Of the 2,228 individuals transported by NASA, 1,825 were U.S. government employees and spouses--1,049 from the executive branch, 771 from the legislative branch, and 5 from the judicial branch. We could not determine the place of employment for 92 individuals. Of the remaining 311 individuals 55 were from foreign governments and associations, and 256 were from the private sector. The following schedule shows the number of individuals, by employment category, provided air transportation by NASA.

Type of employment	STS-1A <sup>a</sup>	STS-1	STS-1 <sup>b</sup>	STS-2A <sup>a</sup>	STS-2	STS-3	STS-4	STS-5	STS-6	STS-7	STS-8	STS-9	Total	Percent Participation
Legislative	107	55	15	145	58	164	90	12	11	61	44	9	771	35
Senate	30	19	5	19	14	45	35	0	0	20	10	3	200	9
House	70	28	10	76	37	94	47	8	5	31	23	4	433	20
Other	3	3	0	2	2	5	3	0	2	3	3	0	26	1
Undetermined	4	4	0	11	0	3	0	0	0	0	5	0	27	1
Spouses	0	1	0	37	5	17	5	4	4	7	3	2	85	4
Executive	93	58	30	94	65	147	164	27	26	160	169	16	1,049	47
Civilian	75	46	25	60	45	112	91	18	20	125	87	14	718	32
Military	17	12	5	11	7	16	31	2	1	6	29	0	137	6
Spouses	1	0	0	23	13	19	42	7	5	29	53	2	194	9
Judiciary	0	0	0	0	0	0	0	0	0	0	5	0	5	0
Employees	0	0	0	0	0	0	0	0	0	0	4	0	4	0
Spouses	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Foreign	18	5	3	2	0	4	5	0	2	6	6	4	55	2
Employees	18	5	3	2	0	4	4	0	1	6	3	3	49	2
Spouses	0	0	0	0	0	0	1	0	1	0	3	1	6	0
Private	6	4	2	2	2	0	0	0	0	58	182	0	256	11
Business	2	1	0	1	1	0	0	0	0	27	43	0	75	3
Associations	4	3	0	0	0	0	0	0	0	10	58	0	75	3
Individuals	0	0	2	0	0	0	0	0	0	4	10	0	16	1
Spouses	0	0	0	1	1	0	0	0	0	17	71	0	90	4
Undetermined	16	15	5	4	7	23	5	0	3	3	10	1	92	4
Persons	16	15	5	2	7	20	4	0	2	2	7	1	81	3
Spouses	0	0	0	2	0	3	1	0	1	1	3	0	11	1
Total	240	137	55	247	132	338	264	39	42	288	416	30	2,228	100 <sup>c</sup>
	***	***	**	***	***	***	***	**	**	***	***	**	*****	****

<sup>a</sup>Launch was postponed after invited guests had been transported to the launch site at KSC.  
<sup>b</sup>First shuttle landing at Edwards Air Force Base.  
<sup>c</sup>Column does not add to 100 percent due to rounding.

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MODE AND COST OF TRANSPORTATION

From April 10, 1981, through November 28, 1983, NASA has spent an estimated \$474,160 to transport the 2,228 invited guests and escorts from Washington, D.C., to the 12 space shuttle events. This included \$410,505 for Eastern airline chartered aircraft to transport 2,117 invited guests and escorts to 9 events and an estimated \$63,655 for NASA Gulfstream aircraft to transport 111 guests and escorts to the other 3 shuttle events.

The number of passengers per shuttle event flown on NASA's chartered aircraft ranged from a low of 55 passengers on a Boeing 727 to observe the first shuttle landing at Edwards Air Force Base, California, to 416 passengers on an L-1011 and Boeing 727 to view the STS-8 launch at KSC. The chartered aircraft costs per shuttle event ranged from \$22,743 for the November 12, 1981, STS-2 launch to \$77,935 for the August 30, 1983, STS-8 launch. NASA said it had requested bids for each of these events and Eastern was always the low bidder.

For three events, NASA used its own aircraft, 12 and 16 seat Gulfstream aircraft, to fly a total of 111 guests and escorts to KSC. This included flying 39 passengers at a cost of \$22,295 to view the STS-5 launch, 42 passengers at a cost of \$25,022 to view the STS-6 launch, and 30 passengers at a cost of \$16,338 to view the STS-9 launch. A schedule showing the transportation data by event follows.

## ENCLOSURE I

## ENCLOSURE I

<u>Space shuttle event</u>	<u>Aircraft type</u>	<u>No. of passengers</u>	<u>Total cost</u>	<u>Cost per passenger</u>
Chartered aircraft:				
STS-1 attempt	L-1011	240	\$ 39,045	\$163
STS-1	Boeing 727	137	26,177	191
STS-1 landing	Boeing 727	55	41,894	762
STS-2 attempt	A-300	247	54,000	219
STS-2	Boeing 727	132	22,743	172
STS-3	A-300, 727	338	54,452	161
STS-4	A-300	264	34,259	130
STS-7	L-1011	288	60,000	208
STS-8	L-1011,727	<u>416</u>	<u>77,935</u>	187
Total		<u>2,117</u>	<u>410,505</u>	194
NASA aircraft:				
STS-5	Gulfstream	39	22,295	572
STS-6	Gulfstream	42	25,022	596
STS-9	Gulfstream	<u>30</u>	<u>16,338</u>	545
Total		<u>111</u>	<u>63,655</u>	<u>573</u>
Total		<u>2,228</u>	<u>\$474,160</u>	\$213

ADMINISTRATIVE SUPPORT COSTS

NASA spent an estimated \$346,565 to provide administrative support for STS guest operations through the STS-9 launch. NASA's public affairs office, in conjunction with the congressional relations office, has the responsibility to plan and carry out the guest operations for STS events. This includes selecting guests and issuing invitations, providing transportation and escort services, planning the guest functions and activities, and assuring these events are smoothly carried out.

The KSC public affairs office has responsibility for supporting guest activities at space shuttle launches and is augmented by personnel from NASA headquarters and other NASA centers. NASA guests are offered special briefings and tours of KSC. Briefings are conducted by designated NASA personnel and buses used for transporting guests are staffed with KSC escort personnel. Some NASA employees are diverted from their normal duties to support launch guest activities.

The following table shows NASA's estimated staff time and costs for NASA headquarters and center personnel who performed public affairs functions, conducted briefings, and escorted guests in conjunction with space shuttle launches.

Space shuttle event	Estimated staff hours <sup>a</sup>			Estimated costs <sup>a</sup>		
	HDQS	Centers	Total	Salaries	Travel	Total
STS-1 <sup>b</sup>	2,895	1,544	4,439	\$ 73,401	\$ 9,326	\$ 82,727
STS-2 <sup>b</sup>	2,172	868	3,040	46,973	5,698	52,671
STS-3	1,401	713	2,114	32,196	4,324	36,520
STS-4	1,181	613	1,794	26,561	3,748	30,309
STS-5	646	914	1,560	23,921	4,193	28,114
STS-6	638	498	1,136	16,864	5,215	22,079
STS-7	1,435	236	1,671	28,501	4,464	32,965
STS-8	1,487	536	2,023	33,779	2,878	36,657
STS-9	<u>584</u>	<u>602</u>	<u>1,186</u>	<u>21,387</u>	<u>3,136</u>	<u>24,523</u>
Total	<u>12,439</u>	<u>6,524</u>	<u>18,963</u>	<u>\$303,583</u>	<u>\$42,982</u>	<u>\$346,565</u>

<sup>a</sup>These figures do not include time spent by some top level NASA officials who escorted guests to some launches.

<sup>b</sup>Includes launch attempts that were aborted and actual launch events.



NASA SPONSORED ENTERTAINMENT,  
LODGING, AND COLLATERAL EXPENSES

NASA sponsored receptions and meals costing \$17,212. These receptions and meals, with one exception, were hosted at the KSC visitors center. The TWA Services, Inc., operates this facility and bills the sponsor for each event. On the occasion of the STS-5 launch, NASA hosted a dinner and cocktails for guests at the Patrick Air Force Base Officers Club, Florida. The NASA-sponsored receptions and meals are listed in the following table.

<u>Space shuttle event</u>	<u>Date provided</u>	<u>Description</u>	<u>Cost</u>
STS-2 attempt	11/03/81	Reception	\$ 2,463
STS-2	11/12/81	Breakfast	500
STS-5	11/09/82	Cocktails and dinner	801
STS-5	11/10/82	Dinner	1,475
STS-6	04/04/83	Lunch	372
STS-7	06/17/83	Wine and cheese	1,154
STS-7	06/17/83	BBQ	4,953
STS-7	06/24/83	Landing breakfast	487
STS-8	08/30/83	Reception	1,000
STS-9	11/26/83	Lunch	507
STS-9	11/27/83	Reception	<u>3,500</u>
Total			<u>\$17,212</u>

NASA officials told us that they may assist visitors in making arrangements but NASA does not pay lodging and other collateral expenses for guests.

NASA SPONSORED LOCAL TRANSPORTATION

NASA spent \$504,601 to lease 665 buses. These buses were used to provide local transportation at KSC for about 33,060 guests, including the 2,228 guests flown down from Washington, D.C.

The following table lists the number of buses NASA provided per launch, the estimated number of passengers transported, and the government costs to lease buses for space shuttle launches.

<u>Space shuttle event</u>	<u>No. of buses</u>	<u>Estimated no. of passengers</u>	<u>Cost</u>
STS-1 <sup>a</sup>	130	5,900	\$132,087
STS-2 <sup>a</sup>	81	3,600	46,163
STS-3	70	3,650	60,931
STS-4	70	3,360	49,658
STS-5	70	4,000	40,215
STS-6	45	1,500	20,192
STS-7	60	5,250	78,158 <sup>b</sup>
STS-8	64	3,100	25,940
STS-9	<u>75</u>	<u>2,700</u>	<u>51,257</u>
Total	<u>665</u>	<u>33,060</u>	<u>\$504,601</u>

<sup>a</sup>Includes launch attempts that were aborted and actual launch events.

<sup>b</sup>Includes a \$30,507 cost for buses leased in connection with the planned landing at KSC.

MANNED FLIGHT AWARENESS PROGRAM

NASA has spent about \$117,539 for transportation and other expenses under its Manned Flight Awareness Program to honor selected NASA employees at shuttle launches. The program recognizes selected employees for their reliability, quality, and safety achievements. The following table shows costs associated with NASA honorees from locations other than KSC.

<u>Space shuttle event</u>	<u>No. of people</u>	<u>Travel</u>	<u>Per diem</u>	<u>Misc.</u>	<u>Total</u>
STS-1	31	\$ 7,584	\$10,230	\$ 2,325	\$ 20,139
STS-3	46	12,066	13,800	3,825	29,691
STS-5	57	14,176	16,695	5,325	36,196
STS-9	<u>51</u>	<u>12,918</u>	<u>14,520</u>	<u>4,075</u>	<u>31,513</u>
Total	<u>185<sup>a</sup></u>	<u>\$46,744</u>	<u>\$55,245</u>	<u>\$15,550</u>	<u>\$117,539</u>

<sup>a</sup>Includes 21 staff people who are panel and selection committee members.

As part of the Manned Flight Awareness Program, the Canaveral Council of Technical Societies, an association of engineering, technical, and scientific societies, hosted four receptions at the KSC visitors center. These receptions which normally took place 2 days before the launch, were for the honorees and their spouses, astronauts, and senior-level government and contractor officials.

The attendees at these receptions and the costs are listed in the following table.

<u>Space shuttle event</u>	<u>Date held</u>	<u>Attendees</u>			<u>Cost</u>
		<u>Contractor and others</u>	<u>Government</u>	<u>Total</u>	
STS-1	04/09/81	385	232	617	\$ 6,320
STS-3	03/20/82	404	234	638	8,562
STS-5	11/09/82	412	258	670	8,794
STS-9	11/26/83	550	235	785	<u>12,489</u>
Total					<u>\$36,165<sup>a</sup></u>

<sup>a</sup>Includes Canaveral Council of Technical Societies expenses of \$441 and KSC visitor center costs of \$35,724.

The Canaveral Council of Technical Societies paid TWA Services, Inc., for the KSC visitor center costs and was reimbursed by participating contractors. The amount of each contractor's reimbursement was computed by dividing the number of reception participants employed by each contractor by the total reception participants employed by all contractors, times the total reception cost. In this fashion, costs for government employees were absorbed by the participating contractors. We were told these reception costs would be allowable charges as indirect costs to existing government contracts. We have requested NASA's formal views as to its legal authority for allowing contractors to charge these expenditures as indirect contract costs that would be funded from NASA's Research and Development appropriations.

NASA-SPONSORED GUEST ACTIVITIES  
FOR FUTURE LAUNCHES

We asked NASA officials to provide us a cost estimate for NASA-sponsored guest activities for the next 10 launches. They said this is still an open question because NASA plans to reevaluate guest activities for future launches. NASA officials said they expect future guest activity will be much less than that experienced through STS-9 because most historical firsts have taken place, such as the first American woman and the first black astronauts in space. As a result, NASA plans to have a panel study this question during March 1984.

OTHER GOVERNMENT COSTS

We also obtained information on costs paid by other government agencies, as shown below.

	<u>Costs incurred by</u>			<u>Total</u>
	<u>U.S. Information Agency</u>	<u>U.S. Postal Service</u>	<u>U.S. Air Force</u>	
Receptions and meals	\$ 3,044	\$5,000	\$2,000	\$10,044
Local transportation	1,770	-	-	1,770
Lodging	15,394	-	-	15,394
Souvenirs and photos	953	-	-	953
Administrative costs:				
Salaries	750	-	-	750
Travel	<u>2,262</u>			<u>2,262</u>
Total	<u>\$24,173</u>	<u>\$5,000</u>	<u>\$2,000</u>	<u>\$31,173</u>

The U.S. Information Agency, at the request of the United States Mission to the United Nations, sponsored trips for United Nations delegates to the STS-3 and STS-4 launches. It also sponsored a trip for an Austrian couple who were winners of a United Nations lottery to view the launch of STS-5.

The U.S. Postal Service and U.S. Air Force co-hosted a reception with NASA for launch STS-8. This particular flight carried a number of U.S. postage stamps on board the orbiter. The Air Force sponsored a portion of the reception because the flight crew included the first black astronaut, who is an Air Force Colonel.

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# United States Senate

COMMITTEE ON APPROPRIATIONS  
WASHINGTON, D.C. 20510

September 19, 1983

J. KEITH KENNEDY, STAFF DIRECTOR  
FRANCIS J. SULLIVAN, MINORITY STAFF DIRECTOR

The Honorable Charles A. Bowsher  
Comptroller General of the United States  
General Accounting Office  
Washington, D.C. 20548

Dear Mr. Bowsher:

Since the beginning of the Space Shuttle era, NASA, the Air Force, and associated contractors have sponsored numerous trips to Cape Kennedy for various individuals to witness launch events.

Invitees have included members of the Executive Branch, Legislative Branch, staff, and others. Transportation has generally been by Air Force aircraft based at Andrews Air Force Base but may also have included aircraft provided by contractors associated with the Space Shuttle Program.

Would you please undertake an investigation to determine answers to the following questions

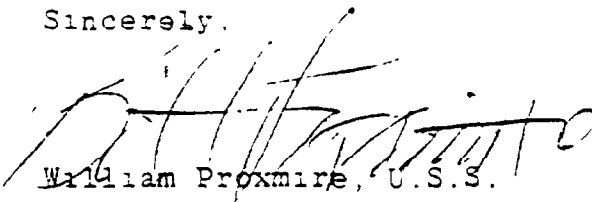
1. How many individuals have been transported to each of the STS launch events? (Please break this down by category of employment.)
2. What was the mode of transportation in each case?
3. What are the total costs to the U.S. government for this transportation?
4. What entertainment, lodging, and collateral expenses were incurred by individuals on these trips which were paid for directly or indirectly by the U.S. government?
5. How many NASA, Air Force or other U.S. employees were involved in the planning and execution of these trips and at what cost to the U.S. government?

Charles A. Bowsher  
September 19, 1963  
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6. Please examine the full range of entertainment, transportation, and lodging expenses paid for by any U.S. government contractors involving U.S. government employees, and officials of the Legislative and Judicial Branches, including an estimate of these expenses, and an assessment as to whether or not they were charged to overhead on U.S. government contracts.
7. Were any of the individuals on these trips afforded special treatment on military bases such as commissary privileges, lodging, free drinks or meals and if so how many individuals and at what cost?
8. Please assess whether or not the use of contractor aircraft for transportation is a violation of any federal or departmental regulations or law.
9. From what budgetary accounts is funding for all identifiable U.S. government costs drawn?
10. Please determine what NASA and the Air Force plans are with regard to supplying transportation using public funding to future STS launch events? And obtain an estimate from both as to the cost projections through the next ten launches for transportation, entertainment, and all associated federal costs.
11. How many individuals have made repeat trips at government expense?

Should you have any further questions, please have your staff contact Ronald L. Tammen of my office at 224-5633. In particular, I would like to have your assessment of how long this investigation might take.

Sincerely,



William Proxmire, U.S.S.

WP rtc