

#Cep

LAUNCHES PER YEAR

	ACTUAL		STS	MODEL
	CY 75	CY 76	1980-92	~Per Year
NASA	7	6	211	21
U.S. Government, Com'l, Foreign	12	9	138	14
DOD	<u>11</u>	<u>11</u>	<u>111</u>	<u>11</u>
	30	26	460	46
Failures	<u>4</u>	--	<u>27*</u>	<u>3*</u>
	34	26	487	49

Points

1. ~~207~~ <sup>167</sup> of ~~217~~ <sup>(and 27 of the foreign launches)</sup> NASA launches in STS era are reusable Spacelab missions.
2. U.S. Government, com'l, foreign launches show slight increase in STS era.
3. DoD flight rate is unchanged in STS era.

\*Planned Reflights

Office of the Secretary of Defense  
 Chief, RDD, ESD, WHS  
 Date: 06 APR 2014 Authority: EO 13526  
 Declassify in Part: X Deny in Full: \_\_\_\_\_  
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 Date: APR 08 2014

13-M-4665

# STS TRAFFIC MODEL

## 5 ORBITERS/2 SITE

(USERS)

	FY 80	81	82	83	84	85	86	87	88	89	90	91	92	TOTAL
<b>ETR</b>														
NASA	1	6	10	10	18	17	19	18	15	17	17	16	3	167
U. S. GOV'T	1	1	-	-	1	-	-	-	1	-	1	1	-	6
U. S. COM'L	1	3	1	2	3	4	5	4	9	8	8	4	2	54
FOREIGN	-	1	3	3	3	3	3	5	5	5	6	6	1	44
DOD	-	-	2	6	7	8	7	5	8	6	7	9	2	67
<b>SUBTOTAL</b>	<u>3</u>	<u>11</u>	<u>16</u>	<u>21</u>	<u>32</u>	<u>32</u>	<u>34</u>	<u>32</u>	<u>38</u>	<u>36</u>	<u>39</u>	<u>36</u>	<u>8</u>	<u>338</u>
REFLIGHTS	-	1	1	1	2	2	2	2	2	2	2	2	1	20
<b>TOTAL ETR</b>	<u>3</u>	<u>12</u>	<u>17</u>	<u>22</u>	<u>34</u>	<u>34</u>	<u>36</u>	<u>34</u>	<u>40</u>	<u>38</u>	<u>41</u>	<u>38</u>	<u>9</u>	<u>358</u>
<b>WTR</b>														
NASA				1	4	6	5	5	6	4	6	6	1	44
U. S. GOV'T				1	1	1	2	2	4	2	4	2	1	20
U. S. COM'L				-	-	-	1	1	-	-	-	1	-	3
FOREIGN				-	-	-	2	3	1	2	1	1	1	11
DOD				2	4	5	4	6	6	6	4	6	1	44
<b>SUBTOTAL</b>				<u>4</u>	<u>9</u>	<u>12</u>	<u>14</u>	<u>17</u>	<u>17</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>4</u>	<u>122</u>
REFLIGHTS				-	-	1	1	1	1	1	1	1	-	7
<b>TOTAL WTR</b>				<u>4</u>	<u>9</u>	<u>13</u>	<u>15</u>	<u>18</u>	<u>18</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>4</u>	<u>129</u>
<b>TOTAL STS OPS</b>	<u>3</u>	<u>12</u>	<u>17</u>	<u>26</u>	<u>43</u>	<u>47</u>	<u>51</u>	<u>52</u>	<u>58</u>	<u>53</u>	<u>57</u>	<u>55</u>	<u>13</u>	<u>487</u>

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OMB STUDY SUPPLEMENT

STS TRAFFIC MODEL

5 ORBITERS/2 SITE

(FLIGHT ELEMENTS)

	FY	80	81	82	83	84	85	86	87	88	89	90	91	92	TOTAL
<u>ETR</u>															
SPACELAB		-	6	8	10	14	16	17	18	17	18	17	18	3	162
UPPER STAGES		2	5	6	11	15	15	15	9	20	14	19	15	4	150
FREE-FLYERS		<u>1</u>	-	<u>2</u>	-	<u>3</u>	<u>1</u>	<u>2</u>	<u>5</u>	<u>1</u>	<u>4</u>	<u>3</u>	<u>3</u>	<u>1</u>	<u>26</u>
SUBTOTAL		<u>3</u>	<u>11</u>	<u>16</u>	<u>21</u>	<u>32</u>	<u>32</u>	<u>34</u>	<u>32</u>	<u>38</u>	<u>36</u>	<u>39</u>	<u>36</u>	<u>8</u>	<u>338</u>
REFLIGHTS		-	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>20</u>
TOTAL ETR		3	12	17	22	34	34	36	34	40	38	41	38	9	358
<u>WTR</u>															
SPACELAB		-	-	-	-	3	4	5	5	5	5	5	5	2	39
UPPER STAGES		-	-	-	-	-	1	1	2	1	1	1	2	0	9
FREE-FLYERS		-	-	-	4	6	7	8	10	11	8	9	9	2	74
SUBTOTAL		-	-	-	4	9	12	14	17	17	14	15	16	4	122
REFLIGHTS		-	-	-	-	-	1	1	1	1	1	1	1	-	7
TOTAL WTR		-	-	-	4	9	13	15	18	18	15	16	17	4	129
TOTAL STS OPS		3	12	17	26	43	47	51	52	58	53	57	55	13	487

~~SECRET~~

# DOD SPACE MISSION MODEL (FY 1977 - 1991) (U)

## LAUNCH TRAFFIC

(includes ELV Launcher in 77-84 period)

PROGRAM	FY 77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	TOTAL
<b>USE SHUTTLE AT KSC**</b>																
<i>Def Sat. Comm. Sys</i> DSCS	1	2	1	1	1	1	1	1	0	0	0	0	0	1	1	11
<i>Sat. Data System</i> SDS	1	0	1	1	0	1	0	1	0	1	0	1	0	1	0	8
<i>Def. Support Program</i> DSP	1	1	1	0	0	1	1	1	1	1	0	1	1	1	0	11
<i>Global Positioning Sys</i> GPS	2	5	2	1	4	4	1	2	2	1	1	1	1	1	1	29
SM II	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	13
SM III	2	0	0	1	1	1	0	1	1	0	0	1	1	0	0	9
STP ASCENT SHARED*	0	0	1	*	0	*	0	*	*	*	*	*	*	*	*	1*
<i>Fleet Sat. Comm.</i> FSC		1	1	2	1											5
<i>NIATO Comm. Sat.</i> NATO III	1	1														2
<i>Survivable Sat Sys.</i> AFSAT (SSS)							2	1	2	2	1	0	0	1	0	9
<i>Gen. Purpose Sat. Comm.</i> GPSCS							2	1	2	1	1	2	1	1	2	13
<i>Deep Space Surv. Sys.</i> DSSS												1	2	0	1	4
TL SHUTTLE KSC				*		2	7	8	9	7	4	8	7	7	6	65*
<b>USE SHUTTLE AF VAFB**</b>																
<i>Defense Met. Sat.</i> DMSP	1	2	2	1	1	1	1	1	1	1	1	1	1	0	1	16
SM I	4	2	4	2	3	2	2	1	2	2	2	2	2	2	2	35
SM IV	1	1	1	1	2	0	1	1	2	0	1	1	2	0	1	15
STP ASCENT SHARED*	0	1	0	0	1	0	*	*	*	*	*	*	*	*	*	2*
<i>Space Test Program</i> X0760-DS							1	1	0	1	1	0	1	1	0	6
<i>Ocean Surveillance</i> DSSS											1	2	0	1	2	6
TL SHUTTLE VAFB							3	4	5	4	6	6	6	4	6	44*
<b>TOTAL</b>	<b>14</b>	<b>17</b>	<b>15</b>	<b>10</b>	<b>15</b>	<b>12</b>	<b>14</b>	<b>13</b>	<b>14</b>	<b>11</b>	<b>10</b>	<b>14</b>	<b>13</b>	<b>11</b>	<b>12</b>	<b>195*</b>

\* ALL STP SHUTTLE LAUNCHES WILL BE CONDUCTED IN CONJUNCTION WITH OTHER PAYLOAD MISSIONS.

\*\* PRIOR TO TRANSITION TO SHUTTLE SOME PROGRAMS ARE NOT LAUNCHED AT THIS SITE.

- 1st SHUTTLE LAUNCH FROM KSC
- 1st SHUTTLE LAUNCH FROM VAFB

~~SECRET~~  
~~EXEMPT FROM GDS~~  
~~EXEMPT FROM GDS~~

~~SECRET~~

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# SPACE SHUTTLE FUNDING THROUGH FY 1983

(\$ millions)

	<u>FY 1977 AND PRIOR</u>	<u>FY 1978</u>	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>	<u>TOTAL</u>
RDT&E	106.8	124.3	169.5	160.5	135.7	146.3	73.3	916.4
PROCUREMENT	0	26.4	148.5	141.5	61.2	12.4	1.8	391.8
MILCON	0	0	148.6	86.5	0	0	0	235.1
	<u>106.8</u>	<u>150.7</u>	<u>466.6</u>	<u>388.5</u>	<u>196.9</u>	<u>158.7</u>	<u>75.1</u>	<u>\$1,543.3</u>

## BACK-UP BOOSTERS

PROCUREMENT		61.9	5.2	7.0	35.2	21.0		\$ 130.3
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## PAYLOAD TRANSITION

RDT&E	3.5	12.2	37.6	45.1	31.8	22.0	7.2	159.4
PROCUREMENT			31.9	12.2	5.5	16.8	16.0	82.4
	<u>3.5</u>	<u>12.2</u>	<u>69.5</u>	<u>57.3</u>	<u>37.3</u>	<u>38.8</u>	<u>23.2</u>	<u>\$ 241.8</u>

AIR FORCE - SUBTOTAL THROUGH FY 1983 \$1,915.4

OTHER DOD PROGRAMS - BACK-UP BOOSTERS 228.0

PAYLOAD TRANSITION  
(Through FY 82) 187.0

GRAND TOTAL \$2,330.4

# TRAFFIC MODEL COMPARISON

## CURRENT <sup>(1977)</sup> VS. 1976 MODEL

<u>NASA</u>	<u>CURRENT</u> REQ'MT	(NASA projection)	<u>STUDY</u> BASE	<i>Reduced Spacelab missions to account for attrition of one orbiter</i>	<u>1976 STUDY</u>
AUTOMATED SPACELAB	58 230		58 167		59 230
<u>U. S. GOVERNMENT</u>					
AUTOMATED SPACELAB	28		28 -		28 -
<u>U. S. COMMERCIAL</u>					
AUTOMATED SPACELAB	41 20		41 20		47 19
<u>FOREIGN</u>					
AUTOMATED SPACELAB	32 29		32 27		32 33
	438		373		448
<u>DOD (AUTOMATED)</u>	114		114		112
<u>TRAFFIC MODEL</u>	552		487		560