

### D.3.1 Delta Launch History

The data in Table 43 summarizes all Delta and Delta-boosted space-vehicle launches since the program began. A launch sequence number is provided in the first column. A launch ID and date are provided in columns 2 and 3. The fourth column indicates the vehicle configuration. The fifth column indicates the launch range. The sixth column indicates the failure-response mode (1 through 5 and NA) that RTI has determined best describes the failure that occurred. For Mode 3 or 4 failures, a suffix of 'T' indicates the vehicle tumbled. Successful launches are indicated by a blank in the Response-Mode column. The seventh column indicates the operational flight phase during which the failure occurred. The last column indicates whether the vehicle configuration is representative of those being launched today. Launches through sequence number 232 were used in the filtering process to estimate failure rate.

Table 43. Delta Launch History

No.	Mission/ID	Launch Date	Vehicle Configuration	Test Range	Response Mode	Flight Phase	Rep. Conf.
1	ECHO I	05/13/60	DM-19	ER	4	2.5	0
2	ECHO IA	08/12/60	DM-19	ER			0
3	TIROS A2	11/23/60	DM-19	ER			0
4	P-14	03/25/61	DM-19	ER			0
5	TIROS A3	07/12/61	DM-19	ER			0
6	S-3	08/15/61	DM-19	ER			0
7	TIROS D	02/08/62	DM-19	ER			0
8	S-16	03/07/62	DM-19	ER			0
9	S-51	04/26/62	DM-19	ER			0
10	TIROS E	06/19/62	DM-19	ER	NA	5	0
11	TSX-1	07/10/62	DM-19	ER			0
12	TIROS F	09/18/62	DM-19	ER			0
13	S-3A	10/02/62	DSV-3A	ER			0
14	S-3B	10/27/62	DSV-3A	ER			0
15	RELAY A-15	12/13/62	DSV-3B	ER			0
16	SYNCOM A-25	02/13/63	DSV-3B	ER			0
17	S-6	04/02/63	DSV-3B	ER			0
18	TSX-2	05/07/63	DSV-3B	ER			0
19	TIROS G	06/19/63	DSV-3B	ER			0
20	SYNCOM A-26	07/26/63	DSV-3B	ER			0
21	IMP A	11/26/63	DSV-3C	ER			0
22	TIROS H	12/21/63	DSV-3B	ER			0
23	RELAY A-16	01/21/64	DSV-3B	ER			0
24	S-66	03/19/64	DSV-3B	ER	4	3	0
25	SYNCOM A-27	08/19/64	DSV-3D	ER			0
26	IMP-B	10/03/64	DSV-3C	ER	NA	5	0
27	S-3C	12/21/64	DSV-3C	ER			0
28	TIROS I	01/22/65	DSV-3C	ER	NA	2 & 5	0
29	OSO-B	02/03/65	DSV-3C	ER			0
30	COMSAT #1	04/06/65	DSV-3D	ER			0