

**2008**

**NASA Range Safety  
Annual Report**

**This 2008 Range Safety Annual Report  
is produced by virtue of  
support from the following:**

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### III. SUPPORT TO PROGRAM OPERATIONS

NASA and KSC Range Safety supported seven launches this year: one from the Western Range, five from the Eastern Range including four Shuttle launches, a Pegasus launch from Reagan Test Site, Kwajalein Atoll, and assisted WFF with the inaugural ATK ALV/HyBoLT launch.

In order to ensure the requirements of [NPR 8715.5](#) are met during pre-launch, launch, and post launch operations, NASA Range Safety personnel work side by side with our Department of Defense counterparts in the Eastern or Western Range Operations Control Centers. In order to ensure safe flight and compliance with requirements identified in NASA safety directives, NASA Range Safety personnel ensure any range safety-related activities with the potential to impact NASA launch criteria are relayed to the NASA Safety and Program officials.

As we look forward to 2009, we anticipate supporting numerous ELV launches at both the Eastern and Western Ranges. Additionally, we expect to support five Shuttle missions as well as the Ares I-X Flight Test Vehicle in the spring/summer.

[Link to 2007 article](#)

EASTERN AND WESTERN RANGE				
Mission	Vehicle	Launch Site	Launch Date	Responsible Org
ISS 1E	STS-122	KSC	2/4/2008	DoD
ISS 1J/A	STS-123	KSC	3/11/2008	DoD
NROL-28	Atlas 5	VAFB	3/13/2008	DoD
GPS 2R19 (M6)	Delta II	CCAFS	3/15/2008	DoD
ICO G1	Atlas 5	CCAFS	4/15/2008	DoD
ISS1J	STS-124	KSC	5/31/2008	NASA
GLAST	Delta II	CCAFS	6/11/2008	DoD
OSTM/Jason-2	Delta II	VAFB	6/20/2008	DoD
Geo Eye 1	Delta II	VAFB	9/6/2008	DoD
IBEX	Pegasus	Kwajalein Atoll	10/19/2008	DoD
COSMO-SkyMed 3	Delta II	VAFB	10/25/2008	DoD
ISS ULF2	STS 126	KSC	11/15/2008	NASA

**FIGURE 8: EASTERN AND WESTERN MISSIONS 2008**

**FIGURE 9: DRYDEN FLIGHT RESEARCH CENTER MISSIONS 2008**

<b>Date</b>	<b>Project Name</b>	<b>Mission</b>	<b>Location</b>	<b>Mission Result</b>
01/18/08	X-48B LSV (Blended Wing Body)	Flight # 7	Edwards AFB	Success
01/31/08	X-48B LSV	Flight # 8	Edwards AFB	Success
02/08/08	X-48B LSV	Flight # 9	Edwards AFB	Success
02/29/08	X-48B LSV	Flight # 10	Edwards AFB	Success
03/07/08	X-48B LSV	Flight # 11	Edwards AFB	Success
04/04/08	X-48B LSV	Flight # 12	Edwards AFB	Success
04/17/08	X-48B LSV	Flight # 13	Edwards AFB	Success
04/18/08	Ikhana (NASA Predator B)	Flight # 55; Functional Check Flight	Edwards AFB	Success
04/28/08	Ikhana	Flight # 56; Pilot Proficiency Flight	Edwards AFB	Success
05/06/08	Ikhana	Flight # 57; Pilot Proficiency Flight	Edwards AFB	Success
05/08/08	X-48B LSV	Flight # 14	Edwards AFB	Success
05/08/08	Ikhana	Flight # 58; Functional Check Flight	Edwards AFB	Success
05/14/08	Ikhana	Flight # 59; Fiber Optic Wing Shape Sensing Research	Edwards AFB	Success
05/15/08	Ikhana	Flight # 60; Fiber Optic Wing Shape Sensing Research	Edwards AFB	Success
05/29/08	Ikhana	Flight # 61; Fiber Optic Wing Shape Sensing Research	Edwards AFB	Success
05/30/08	Ikhana	Flight # 62; Fiber Optic Wing Shape Sensing Research	Edwards AFB	Success
06/12/08	X-48B LSV	Flight # 15	Edwards AFB	Success
06/17/08	Ikhana	Flight # 63; Fiber Optic Wing Shape Sensing Research	Edwards AFB	Success
06/19/08	X-48B LSV	Flight # 16	Edwards AFB	Success
06/28/08	Ikhana	Flight # 64; Functional Check Flight	Edwards AFB; R-2508 Complex	Success
07/01/08	Ikhana	Flight # 65; California Emergency Fire Mission	Edwards AFB; R-2508 Complex	Success
07/03/08	X-48B LSV	Flight # 17	Edwards AFB	Success
07/08/08	Ikhana	Flight # 66; California Emergency Fire Mission	Edwards AFB; North and Central California	Success
07/10/08	Small UAS		Edwards AFB	Failure <sup>1</sup>

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<b>Date</b>	<b>Project Name</b>	<b>Mission</b>	<b>Location</b>	<b>Mission Result</b>
07/19/08	Ikhana	Flight # 67; California Emergency Fire Mission	Edwards AFB; North and Central California	Success
07/21/08	X-48B LSV	Flight # 18	Edwards AFB	Success
07/21/08	X-48B LSV	Flight # 19	Edwards AFB	Success
07/25/08	X-48B LSV	Flight # 20	Edwards AFB	Success
08/11/08	X-48B LSV	Flight # 21	Edwards AFB	Success
08/11/08	X-48B LSV	Flight # 22	Edwards AFB	Success
08/13/08	X-48B LSV	Flight # 23	Edwards AFB	Success
08/18/08	Ikhana	Flight # 68; Functional Check Flight	Edwards AFB	Success
09/04/08	X-48B LSV	Flight # 24	Edwards AFB	Success
09/11/08	X-48B LSV	Flight # 25	Edwards AFB	Success
09/17/08	Ikhana	Flight # 69; Functional Check Flight	Edwards AFB; R-2508 Complex	Success
09/18/08	X-48B LSV	Flight # 26	Edwards AFB	Early RTB <sup>2</sup>
09/18/08	X-48B LSV	Flight # 27	Edwards AFB	Success
09/19/08	Ikhana	Flight # 70; California Emergency Fire Mission	Edwards AFB; Central California	Success
09/24/08	X-48B LSV	Flight # 28	Edwards AFB	Success
10/06/08	X-48B LSV	Flight # 29	Edwards AFB	Success
10/06/08	X-48B LSV	Flight # 30	Edwards AFB	Success
10/15/08	X-48B LSV	Flight # 31	Edwards AFB	Success
10/16/08	X-48B LSV	Flight # 32	Edwards AFB	Success
10/20/08	Ikhana	Flight # 71; Functional Check Flight	Edwards AFB	Success
10/23/08	X-48B LSV	Flight # 33	Edwards AFB	Success
10/23/08	X-48B LSV	Flight # 34	Edwards AFB	Success
10/29/08	X-48B LSV	Flight # 35	Edwards AFB	Success
10/30/08	X-48B LSV	Flight # 36	Edwards AFB	Success
11/01/08	Ikhana	Flight # 72; Acoustics	Edwards AFB	Success
11/21/08	X-48B LSV	Flight # 37	Edwards AFB	Success
11/21/08	X-48B LSV	Flight # 38	Edwards AFB	Success
11/25/08	X-48B LSV	Flight # 39	Edwards AFB	Success
12/02/08	Ikhana	Flight # 73; Functional Check and Proficiency Flight	Edwards AFB	Success
12/06/08	Ikhana	Flight # 74; Acoustics	Edwards AFB	Success
<sup>1</sup> Single Pilot, Multi-Vehicle Flight. Total loss of one vehicle and associated payload.				
<sup>2</sup> FTS Droque Chute Bottle Pressure exceeded limit due to temperature inversion at altitude.				

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DATE	VEHICLE	ACRONYM	LOCATION	LAUNCH RESULT
1/11/2008	36.243 Terrier-Black Brant	LIDOS (Long-Slit Imaging Dual Order Spectrograph)	White Sands Missile Range, NM	S
1/18/2008	40.021 UE Black Brant XII	SCIFER-2 (Sounding of the Cusp Ion Fountain Energization Region-2)	Andoya Rocket Range, Norway	S
3/27/2008	36.226 Terrier-Black Brant	CIBER (Cosmic Infrared Background Experiment)	White Sands Missile Range, NM	S
4/14/2008	36.240 UE Black Brant IX	TIMED SEE Underflight Calibration Experiment (TIMED) - Thermospheric Ionosphere Mesosphere Energetics and Dynamics (SEE) - Solar EUV Experiment	Wallops Island	S
5/1/2008	36.223 UH Terrier-Black Brant	X-ray Quantum Calorime	White Sands Missile Range, NM	S
6/26/2008	39.008 DR Black Brant XI	NGSP (Next Generation Sensor Producibility)	Wallops Island	S
6/27/2008	30.074 NO Orion	N/A	Wallops Island	S
7/14/2008	41.075 GT Terrier Mk70 Improved Orion	Sub-TEC II (Suborbital Technology Experiment Carrier)	Wallops Island	S

**FIGURE 10: WALLOPS FLIGHT FACILITY MISSIONS 2008**