

Author index

April R.			
Goodbye, Moon!	130		
First pick your planet	216		
Short life on hellish planet	454		
Ashworth S.			
Battle between old and new	252		
Cain J.R.			
Moon dust - a danger to lunar explorers	60		
Coppinger R.			
The reality of where we are - can space save the planet?	116		
Boeing and Bigelow work on future plans	326		
Russia's Soyuz replacement	327		
China's new Long March booster	328		
Russian company leaves Harwell	328		
First private space station	372		
Orion 1 Prime launcher selection	367		
Space Station to get Node 4	367		
UK Space Agency awaits funding review	406		
Europe to decide on ATV future direction	445		
US military plans reusable winged rocket test	446		
Europe evaluates plans for future launcher	447		
India pushes human spaceflight	448		
Bigelow signs space station deals	449		
Corneille P.			
Six years of MER operations on Mars	20		
More Wisdom with WISE	48		
Geologists' delight at asteroid samples	290		
Rosetta's flyby of asteroid 21 Lutetia	334		
Half-way to Pluto	420		
Corneille P., Simpson C. and Kremer K.			
A new eye on the Sun	134		
Cunningham W.			
Losing the will to explore space	196		
Cutts S.			
Building bridges between worlds of art and science	392		
Dawson M. and Simpson C.			
Space Station Chronology	96		
Day D.			
Tough little spinner	66		
Black antennas	105		
A paler shade of black	190		
Peering into PANDORA's box	304		
Taste of space in Windy City	390		
Journey to a red moon	424		
Easton R.			
The genesis of GPS	68		
Green A.			
Journey into Space	74		
Charm and modesty of Apollo astronauts	274		
Guillemette R.G.			
Pad Leader and American space legend	349		
Horsford C.			
The origins of space law	110		
Ivanovich G.			
Cosmonauts commemorated	466		
Kidger N.			
Space Station Chronology	14		
Kremer K.			
Tranquility' handed over to NASA	6		
<i>Atlantis</i> amkes crucial ISS delivery	10		
One extra Shuttle flight for NASA?	50		
Shuttle delivers spares stash to ISS	52		
ISS crew down to two after Soyuz undocks	58		
New tower takes shape at KSC	94		
Countdown for <i>Discovery</i> mission to Space Station	171		
Orion could be ready by 2013	175		
Obama tweaks radical NASA goals	211		
Russian science beauty unveiled	214		
Space Shuttle exhaust creates exotic clouds	220		
WORF and Klingons occupy Space Station	226		
Test version of Orion crew capsule takes shape	245		
Emotions ride high for last launch of <i>Atlantis</i>	249		
<i>Atlantis</i> ' ;ast blast with Russian beauty	298		
Last Shuttle boosters arrive at KSC	303		
Test capsule is joined up	337		
Artificial' funding crisis aims to circumvent US Congress	338		
3D Shuttle tribute graces Launch Control Center	344		
Orion Pathfinder moves to test phase	366		
SpaceX prepares for Dragon flight	408		
<i>Discovery</i> readied for final flight	414		
Plan for crewed Asteroid mission	426		
<i>Discovery</i> carries 'extra' room	450		
End of road for giant fuel tank	456		
Kennedy landscape to change forever	458		
Space Shuttle artwork legacy	460		
Kremer K., Simpson C. and van de Haar G.			
New window on the world	139		
Kremer K. and van de Haar G.			
<i>Discovery</i> 's penultimate voyage	219		
Lawrie A.			
Anniversary of Saturn rockett's first test firing	262		
Identifying Saturn F-1 engines after 40 years - Part 1	308		
Identifying Saturn F-1 engines after 40 years - Part 2	346		
MacTaggart K.			
Cosmonaut takes chair at UN Space Committee	208		
McDowell J.			
Satellite Digest	78, 92, 128, 170, 210, 248, 278		
McNicholas D.			
Space communications down-under	100		
Mulheirn R.			
Lunar destiny	186		
Powell J.			
ELVIS has left the launch pad	151		
Iconic images capture Cape Canaveral origins	380		
Richards G.			
Satellite Digest	288, 332, 370, 412		
Robertson D.F.			
Workers grounded without pay	300		
Last chance to view a Space Shuttle launch	356		
Sanibel M.			
Flawed logic of US Space Shuttle	178		
Schuminszky N.			
Hungry for Space - Simonyi in orbit	26		
Politics of the first socialist spacefarers	228		
Simpson C.			
Mission to test concepts of harvesting solar power	86		
SpaceX awaits clearance to launch Falcon 9	129		
Bolden carves out commercial future for KSC	132		
Space Station Chronology	147		
Liftoff for British space agency	167		
Boom time for UK space business	325		
US space policy under spotlight	378		
Spall N.			
British ESA astronaut Tim Peake in training	89		
British election will set policy course	91		
Space biomedicine - a UK perspective	173		
Training to the peak of perfection	250		
Systems review propels Skylon into spotlight	405		
Spiteri G.			
Space Station Chronology	182, 224, 257, 295, 340, 383, 417, 463		
Stevenson R.			
Missles that changed history	267		
Stewart M. and A.			
How giving up Skylab cost the Earth	434		
Quine T.			
Women included in new taikonau group	165		
van de Haar G. and Simpson C.			
Simulated journey to the red planet	172		
van de Haar G.			
First Air Force spaceplane launches into blackout	209		
Launch of new high tech spec military satellite	369		
Extending military capabilities	375		
Walmsley W.			
Growing food in space	388		
Zheleznyakov A.			
Forgotten space dogs	264		

Subject index

A			
ABMA	262	Apollo 13	352, 390
ACV	327	Apollo 15	311
AEHF	369	Apollo 16	310
Aero Sekur	286, 388	Apollo 18	347
Afriye, Adam	91	Apollo moon landings	100
AFSCN	108	Apollo-Soyuz	352, 383
Agrospace	388	Ares 1	51, 94, 133, 250, 303
Aleksandrov	228	Ariane 5	87, 247, 369, 411, 447
Alpha	266	Arianespace	247, 369, 411
Alpha Magnetic Spectrometer	287	Arktika (Arctic) satellites	413
Ammonia hoses	142, 148	ARPA	262
AOMC	262	Ashley, Robert	215
Apollo astronauts	274	Asteroids	87, 290, 378, 422
Apollo programme	61, 351	Asteroid 21 Lutetia	334
Apollo 1	351	Asteroid mission	290, 426
Apollo 8	308, 346	Asteroid Sample Return	290, 426
Apollo 10	346	Astronauts	
Apollo 11	185, 351, 426	Aldrin, Buzz	350
		Anderson, Clay	171, 219, 225
		Antonelli, Tony	295, 298, 330
		Armstrong, Neil	103, 205, 212, 253, 350
		Behnken, Robert	139, 182
		Bobko, Karol J	190
		Bolden, Charles F	8, 52, 130, 176, 205, 213, 286, 325, 338, 374, 378, 406
		Bowen, Steven	295, 298, 330
		Bresnik, Randy	52, 97
		Caldwell Dyson, Tracy	47, 221, 224, 257, 295, 298, 340, 383, 417
		Cernan, Gene	212, 253, 350
		Chaffee, Roger	351
		Chamitoff, Gregory	96
		Chilton, Kevin	377
		Coleman, Cady	341, 385
		Collins, Mike	352
		Conrad, Pete	60, 350
		Creamer, T J	59, 96, 144, 147, 182, 224, 249, 257, 295, 298, 418

- Cunningham, Walt 196, 255
De Winne, Frank 14, 54, 58, 97, 250
Duke, Charles 12
Dutton, Jim 171, 219, 225
Ferguson, Chris 146
Fincke, Michael 224
Foale, Mike 224, 250
Foreman, Michael 55
Fuglesang, Christer 250
Glenn, John 189, 350
Good, Michael 295, 298, 330
Grissom, Gus 351
Haise, Fred 187
Ham, Ken 295, 298, 330
Hilmers, David C 190
Hire, Kathryn 139, 182
Hobaugh, Charles 52
Kuipers, André 89, 250
Laliberte, Guy 58
Lindsey, Steve 458
Lovell, Jim 212, 253, 350, 390
Massimino, Michael 183, 303
Mastracchio, Rick 171, 219, 225
McDivitt, Jim 351
Melvin, Leland 11
Metcalfe-Lindenburger, Dorothy 171, 219, 225
Mitchell, Edgar 186
Nespoli, Paolo 89, 250, 341
Noguchi, Soichi 59, 96, 124, 140, 147, 182, 204, 221, 224, 249, 257, 295, 298

Pailles, William D 191
Parazynski, Scott 184
Patrick, Nicholas 139, 182
Payette, Julie 58
Payton, Gary 377
Peake, Timothy 89, 167, 173, 250
Poindexter, Alan 171, 219, 225
Reisman, Garrett 295, 298, 330
Robinson, Stephen 139, 182
Satcher, Robert 55, 385
Schirra, Wally 351
Schmitt, Jack 64
Sellers, Piers 295, 298, 330
Sharman, Helen 74
Shepard, Alan 178, 187, 352
Simonyi, Charles 26
Stafford, Thomas 351
Stewart, Robert L 191
Stott, Nicole 14, 52, 59
Sturckow, Rick 385
Suraev, Max 58, 144, 147, 182, 224
Thirsk, Robert Dr 14, 58, 97
Thomas, Andy 340
Virts, Terry 139, 182
Vittori, Roberto 250
Walheim, Rex 386
Walker, Shannon 47, 219, 340, 383, 417
Wheelock, Douglas 47, 340, 383, 417
White, Ed 351
White, Robert M 276
Whitson, Peggy 224, 386
Wilmore, Barry E 11, 52
Williams, Jeff 14, 54, 58, 96, 143, 147, 182, 224

Williams, Sunita 385
Wilson, Stephanie 171, 219, 225
Wolf, Dave 386
Yamazaki, Naoko 171, 219, 225
Zamka, George 139, 182
Astronaut salary 91
ATK 303
Atlas 413
Atlas-5 367, 375
Atlas-Centaur 178
AT-Space 261
ATV 411, 445
Australia 100
CDSCC 100

B
Baltuck, Miriam Dr 101
Beast of Kandahar 304
Belka 264
Bennett, Steven 88, 206
Bigelow Aerospace 326, 372, 449
Bigelow, Robert 372
BIS library 397
BISE 418
BNSC 45, 167, 406
Boeing 326, 369, 372, 375, 410, 413
Bond, Alan 405
Branson, Sir Richard 46

Bush, George 50, 254, 300, 374, 378

C
Canadarm2 15
Canine cosmonauts 264
Cape Canaveral 380
CarbonSat 410
Carrington, Richard 134
Cassini mission 127
CCSD 262
CEA 388
Chaika 265
Chandrayaan-1 47
Charon satellite 421
Chernushka 266
Chicago 390
China 410
Beidou navigation satellite 367
CZ launcher 171
EO spacecraft 367
Female taikonaut 165
Long March booster 328, 367
Military 367
Yaogan 10 satellite 367
CIA 304
CNES 165, 411
Columbus (laboratory) 16, 59, 147
Comsats 190
Constellation, Project 130, 146, 175, 205, 211, 253, 300, 337, 375
Copernicus, Nicolaus 134
COPUOS 208
Cosmonauts 410
Farkas, Bertalan 26, 228
Gagarin, Yuri 222, 266
Keoktiskov, Konstantin 467
Kisim, Leonid 468
Kondratiev, Dmitri 341
Kornienko, Mikhail 224, 257, 295, 298, 340, 383, 417

Korolev, Sergei 265
Kotov, Oleg 59, 96, 144, 147, 182, 224, 249, 257, 295, 298, 410

Kubasov, Valeriy 231
Lazarev, Vasily 265
Lazutkin, Alexei 410
Magyar, Béla 228
Makarov, Oleg 265
Popov, Leonid 208, 231
Popvich, Pavel 466
Prunariu, Dumitru-Dorin 208
Romanenko, Roman 14, 58, 99
Romanenko, Yuri 99
Ryumin, Valeriy 231
Sevastyanov, Vitaly 467
Skvortsov, Alexander 224, 257, 295, 298, 340, 383, 417

Strekalov, Gennady 265
Surayev, Maxim 14, 96, 411
Titov, Vladimir 265
Yurchikhin, Fyodor 340, 383, 417
Zaytsev, Andrey 469
CRAF mission 291
CST-100 326, 413
CST vehicle 374
CubeSat 326
Cupola 124, 139, 149, 182, 257
Cygnus 329

D
Davydov, Vitaly 325
Dawn 294, 423
Delta II 166
Delta 2 Heavy 375
Department of Defence 262
Destiny laboratory 15, 148
DHS/Node 4 367
Di Pippo, Simonetta 173, 445
Doppler 69
Dordain, Jean-Jacques 8, 85, 325, 411
Dovzhenko, Alexander Dr 261
Dragon 47, 255, 285, 371, 408
Drayson, Lord 45, 46, 91, 167, 173, 246
DSN 100, 424
Dutch Space BV 169

E
EADS Astrium 86, 289, 368
EarthKam 16, 226
Earth science 133
EchoStar XIV satellite 170
EELV 413
Elbon, John 372

ELVIS 151
Energia 327
EO satellite system 328
Eris 422
ESA 6, 7, 8, 85, 96, 126, 134, 139, 167, 168, 289, 325, 328, 405, 406, 410, 411, 445
astronaut recruitment 89, 250
Council 285
CryoSat-2 207, 331
Envisat 206
Future launcher (FLPP) 447
Giotto 291
Herschel 47, 336
Mars Express 166
Mars mission 369
Rosetta 7, 294, 334
SMOS 9
SWARM 449
ESMO 11
Esposito, Larry 218
EUMETSAT 168
European Commission 88
Europe's weather satellites 168

F
Falcon 9 129, 164, 213, 255, 285, 371, 379, 408
French Guiana 247

G
Galilei, Galileo 134
Galileo system 87, 88, 406
Gelmini, Mariastella 325
Gemini spacecraft 350
GENSO 126
Geostationary missions 169
German V-2 267
Gerstenmaier, William 340
GIOVE-A 88
Glavkosmos 168
Global Xpress 369
GMES 406
GPS 68, 368
Green, Andy 125, 325
Griffin, Michael 131, 212, 254, 327, 374, 378
GSAT 10 369

H
Hale, George Ellery 134
Hall, Rex 317
Hanks, Tom 352, 391
Harmony/Node 2 14, 367
HLLV 367
Hubble Space Telescope 57, 127, 180, 209, 422
Human space exploration 378
Human spaceflight 285
Hungary 26, 228
Hydra 422
Hylas 411

I
ICC 298
IISL 110
ILS 170
India
Cryogenic third stage 206
GSLV 206
Human spaceflight 126, 206, 448
ISRO 126, 168, 206, 247, 369
Inmarsat 369
Intelsat 17 411
Intercosmos 228
ISS (Space Station) 14, 26, 44, 47, 50, 52, 58, 85, 89, 91, 96, 124, 129, 130, 139, 147, 169, 181, 182, 205, 211, 214, 219, 224, 249, 250, 253, 257, 285, 287, 295, 298, 326, 329, 340, 365, 367, 372, 378, 383, 389, 405, 409, 411, 413, 414, 417, 463
Butterflies 59
Collier Trophy 185
Crew Support LAN 150
HICO/RAIDS/HREP 98
SPHERES 297, 417
Italy 325
Itokawa, Hideo 293
IVGEN 260

- J**
James Webb Space Telescope 48
Japan
 GOSAT 410
 Hayabusa spacecraft/mission 290
 HTV 15, 53
 JAXA 8, 290, 327, 383
 Kibo laboratory 15, 147
 Suisei/Sakigake 291
Jason 3 165
Johannes Kepler 411
Johnson Space Center 311
JPL 20, 424
Jules Verne 411
JUMPSEAT 106
Jupiter 90, 421
- K**
Kalamazoo museum 347
Kazakhstan 58, 297
Kennedy, John F 181, 189
Kennedy Space Center 94, 132, 303, 344, 458
Klingons 226
Korea 11
Kuiper Belt Objects 422
Kyoto Protocol 410
- L**
Laika 264
Lavochkin 327
Leinbach, Mike 142, 303, 344, 458, 460
LEO 175, 413
Leonardo (MPLM) 219, 226, 416
Lisichka 265
Lockheed Martin 153, 175, 211, 218, 245, 304, 337, 366, 367, 369, 374, 410, 413, 426
Lovells of Lake Forest 390
Lowell, Percival 421
- M**
MAF 337
Mandelson, Lord 167
Mariner II 134
Mars 422, 424
 Aurora Mars 406
 Craters 20
 Curiosity 25
 ExoMars 25, 289, 369
 Exploration 8, 20, 61, 173, 378
 Human mission 61, 173, 205, 388, 426
 Life on 289
 Mars Direct 255
 Mars orbiter 369
 MER 20
 Meteorites 24
 MSL 104
 Mars500 172, 246
 Mars Lander 25
 Odyssey 22
 Opportunity 20, 93
 Reconnaissance 25, 445
 Rovers 289
 Sample Return 369, 424
 Simulation test 172, 246
 Spirit 20, 93
Marshall Spaceflight Center 310, 346
McDonnell Aircraft Corp 349
Mercury 327
Meteorite 290
Meteorology 413
Microgravity 173
Military Shuttle 190
MilStar 369
Mir space station 389, 410
Moon
 Exploration 61, 378
 Human mission 61, 130, 181, 187, 205, 388
 LRO/LCROSS 47
 Lunar lander 62, 410
 Lunar missions 104
 Lunar module 187
 Lunar rovers 410
 Lunar soil & dust 61
 Orion mission 62
 Phase B1 study 410
 Sample return 247
 Water 47
Moore, Sir Patrick 330
Mooshka 266
Mother of Pearl clouds 220
MSG 168
- MTG 168
Musk, Elon 129, 213, 285, 371, 408
MUOS satellites 305
- N**
NASA 6, 8, 18, 50, 87, 90, 93, 139, 151, 205, 211, 214, 249, 250, 253, 262, 285, 287, 289, 295, 298, 303, 309, 326, 367, 372, 375, 378, 407, 409, 411, 414, 424
 Budget 130, 175, 430
 CCDev 326
 CELSS 389
 COTS 47, 50, 374, 379, 408
 Galileo spacecraft 291
 Genesis mission 292
 Honeywell Advanced Space Academy for Educators 331
 Human spaceflight & robotic exploration 57
 Juno spacecraft 90
 LCC 344
 Lunar test capsule 337
 Manned spaceflight 87, 211, 253, 337
 Mars mission 369
 Monkeys (and PETA) 286
 MoonRise 90, 216
 NEAR-Shoemaker 291
 New Frontiers mission 90, 216
 Orbiting Carbon Observatory 410
 OSIRIS-REX 90, 216
 OSO 134
 Rocket-plane 47
 SAGE 90, 216, 464
 SDO 134
 Stardust mission 128, 292
 WISE 48
NASM 310
NASRDA 248
NEAR 291
Near Earth asteroids 290, 426
New Mexico Museum of Space History 268, 311
NewSpace 253
Neptune 422
New Horizons 421
Nigeria 248
Nilesat 201 369
Nix 422
Norway 406
NRO 105, 190, 304
- O**
Obama, Barack 51, 57, 85, 128, 129, 130, 145, 174, 175, 205, 211, 245, 249, 250, 253, 287, 294, 300, 303, 326, 337, 366, 367, 374, 378, 426
OCO satellite 133
OHB 88, 410
OldSpace 253
O'Neill, Gerard K 254
Oort, Jan 423
Orbital Sciences 329
Orbital Space Complex 372
Orion 9, 50, 133, 175, 211, 245, 250, 252, 337, 366, 374, 426, 430
OSP 375
OTV 375
- P**
Panoramic camera 289
PAN satellite 304
Pantagonian icefield 18
Paradigm 165
Pathfinder 375
Pchelka 266
Perminov, Anatoly 12, 87, 90, 368
Phobos/Phobos Grunt 166, 424
Planck 329
Plasma Crystal-3 Plus Experiment 342
Pleiades satellites 411
Pluto 104, 421
Plutoids 422
Plymouth Rock 426
Poisk/MRM-2 147, 214, 224
Portsmouth Grammar School 330
Powerhouse Museum 347
Prisma satellite 285
Progress 147, 182, 257, 297, 342, 383, 411, 417
Project Gemini 350
- Project Mercury 349
Putin, Vladimir 368, 406
- Q**
Quaoar 422
- R**
Raman Laser Spectrometer 289
Rascom-QAF1R 369
R & D Engines 347
RD-180 rocket engine 413
Reaction Engines 8, 128, 405
Reusable Booster System 446
Robonaut 2 (R2) 365, 416
Rocketdyne 308, 346
Rockwell 351
Roscosmos 169, 214, 342, 411
RSC Energia 214
Russia 12, 14, 214, 247, 253, 325
 Angara rocket 11, 90
 Energomash 413
 Glonass system 368
 Kosmos rocket 210
 Manned spaceflight 126
 MLM 215
 Nuclear spacecraft 90
 Rassvet/MRM-1 214, 249, 298, 342
 Space tourists 210
 Vostochny Space Centre 126
 Weather satellite network 413
- S**
SABRE 405
SAGE (Venus) 454
Sample return 216, 292
Satellite missile tracking tests 329
Saturn 127, 422
Saturn programme 262
Saturn rockets 262
Saturn F-1 engines 308, 346
Science Museum Oklahoma 348
Sci-Fi 392
Sedna 422
Skylab 134, 434
Skylon 8, 128, 256, 404
Slyom Laszlo 26
SOHO 134
Solar System 422
Southwood, David Prof 336
Soviet Space programme 228, 264
Soyuz 87, 89, 96, 147, 182, 205, 213, 219, 224, 228, 247, 253, 296, 327, 340, 383, 411, 416, 417, 463
Soyuz 35 capsule 230
Soyuz-FG 26
Soyuz-ST 411
Soyuz TMA-15 58, 96
Soyuz TMA-17 96
Soyuz TMA-18 463
Soyuz TMA-20 450
Soyuz TMA-01M 465
Soyuz (tourist) 210
Space Adventures 26, 413
Space biomedicine 173
Space exploration 10, 11, 12, 26, 45, 116, 131, 178, 205, 254
Space food production 388
Space law 110
SpaceShipTwo 46
Space Shuttle 50, 178, 190, 205, 298, 303, 352, 356, 375, 379, 411, 416
 Atlantis 4, 10, 11, 44, 51, 52, 96, 190, 205, 214, 219, 244, 249, 250, 295, 298, 303, 330, 344, 383, 460
 Challenger 179, 191, 254, 352, 460
 Columbia 151, 222, 286, 287, 300, 352, 460
 Discovery 171, 204, 205, 219, 225, 250, 253, 287, 365, 409, 414, 460
 Endeavour 84, 96, 139, 148, 153, 182, 205, 303, 410, 456, 460
 Enterprise 178
 External tank 456
 Observation cameras 151
 3D Shuttle displays 344, 460
Space solar power 86
Space tourism 26, 46, 405, 406
SpaceX 47, 127, 129, 164, 213, 285, 371, 372, 379, 408

Spain	406	Tsenki	328	Vega 1 & 2	291
SPEM	286	Tsiolkovsky, Konstantin	254	Vega booster	127
Sputnik	178, 264			Venus	134, 454
SRB	303	U		Veterok	265
Sri Lanka	126	UAV	304	Vietnam	
SRTM	104	Udvar-Hazy	310	VAST	368
SSPS	8	UFO communications satellite	306	ENRMS	368
SSTL	11, 88, 126, 169, 248	Ugolyok	265	EO satellite	368
Stafford Air & Space Museum	348	United Kingdom		Virgin Galactic	46, 168, 247, 329, 406
Starchaser Industries	88, 206	ESA facility	91	Von Braun, Wernher Dr	262, 268
Starlet	266	Human spaceflight	91, 173, 327, 379	Vostochny space centre	406
Star Trek	226	Innovation Centre	167, 328, 406	Vostok	264
STEMNET	12	Space development	91, 325	VSS Enterprise	168, 329
StenniSphere	347	Space exploration	91, 167, 379		
Stern, Alan Dr	422	Space industry	46, 125, 167, 325, 326	W	
Strelka	264	UKSA	45, 91, 167, 173, 246, 251, 285, 289, 325, 326, 328, 405, 406	WhiteKnight	46, 375
STSS	329	United Launch Alliance	304	Whitesides, George T	247
Sun	127, 134, 285, 407	Unity/node 1	6, 367	Willetts, David	246, 289, 325, 326, 327, 328, 330, 378, 405, 406
Solar Probe Plus	407	University of Leicester	127	Williams, David	167, 285, 324, 406
SVET Space Greenhouse	389	United States	424	WISE	294
T		Air Force	190, 209, 304, 369, 375	WORF	226
Tachikawa, JAXA President	219	Air Force ground stations	105	WSPG/WSMR	268
Taikonauts		Air Force spaceplane (X-37B)	13		
Lingchao, Li	165	Congress	338, 366, 367, 372, 379	X	
Liwei, Yang	165	Military	246, 268, 369, 446	X-37 programme	375
Waping, Yang	165	Navy	306	X-ray diffractometer	289
TASS	265	Space exploration	130, 211, 325, 327		
Taurus 2	329	Space policy	378	Y	
TDRSS	106	Space programme	196, 253, 327, 378	Yves Le Gall, Jean	247
Telecommunications satellite	406	X-planes	376		
Thales Alenia Space	165, 168	Unity node	6	Z	
Timation	69	UN Space Committee	208	Zarya module	6, 58, 340
Titan II	350	Uranus	422	Zero-g	59, 174
TNO	423			Zhemchughina	266
Tongasat	67	V		Zvezda service module	17, 54, 147, 182
Tranquility/node 3	6, 96, 139, 148, 182, 367	Van Cise, Ed	223	Zvezdochka	266
Trujillo, Chad	422	VEGA	126		

Book reviews

Anderson J. et al		Gangle T.		Musgrave G. et al	
The Galaxy Disk in Cosmological Context	33	The Development of Outer Space - Sovereignty and Property Rights in International Space Law	111	Safety Design for Space Systems	34
Aubin D.		Gordon R.M.		Myrabo L.N. et al	
The Heavens on Earth	436	The Space Shuttle Program - How NASA Lost its Way	236	Lightcraft Flight Handbook LTI-20	35
Ball A. et al		History Channel and Go Entertain		Pelton J. et al	
Planetary Landers and Entry Probes	236	The Universe - Season One	237	License to Orbit - The Future of Commercial Space Travel	34
Bell J.		The Universe - Season Two	237	Pillinger C.	
Mars 3-D - A Rover's-Eye View of the Red Planet	34	The Universe - Season Three	237	My Life on Mars	472
Bely P.-Y. et al		The Universe - Season Four	472	Prelinger M.	
A Question and Answer Guide to Astronomy	473	Jenkins D.R. et al		Another Science Fiction — Advertising the Space Race (1957-1962)	436
Christopher J.		Servicing the Hubble Space Telescope - Space Shuttle <i>Atlantis</i> 2009	237	Rocket Rights Collection, The	
The Apollo Story	33	Jones B.W.		Journey to the Edge of the Universe	35
The Shuttle Story	237	Pluto — Sentinel of the Outer Solar System	436	Riley C. et al	
Cutts S.		Kenny P.		Apollo 11 - Owner's Workshop Manual	33
Viking Village	236	The Man Who Supercharged Bond	34	Scheffter J.	
Dewar J. et al		Mackemson H.		The Race	34
The Nuclear Rocket - Making our Planet Green, Peaceful and Prosperous	35	Media, NASA and America's Quest for the Moon	472	Steven-Boniecki D.	
Dick S.J.		Manber J.		Live TV from the Moon	473
NASA's First 50 Years: Historical Perspectives	472	Selling Peace - Inside the Soviet Conspiracy that Transformed the US Space Program	236	Stooke P.J.	
Dickson P.		May B. et al		International Atlas of Lunar Exploration	436
A Dictionary of the Space Age	33	BANG! The Complete History of the Universe	34	Warsitz L.	
Discovery Channel and Demand DVD		McDonald A. et al		The First Jet Pilot - The Story of German Test Pilot Erich Warsitz	236
Stephen Hawking's Universe	472	Truth, Lies and O-Rings - Inside the Space Shuttle Challenger Disaster	35	Wiesel W.E.	
French F. et al		Morrison I.		Spaceflight Dynamics	473
Into That Silent Sea - Trailblazers of the Space Era, 1961-1965	237	Introductions to Astronomy & Cosmology	237		
Gallentine J.					
Ambassadors From Earth - Pioneering Explorations with Unmanned Spacecraft	34				