

# **High Risk Airports Benchmarking Survey Report**

September 2013

PREPARED BY:  
THE VANALLEN GROUP, INC.

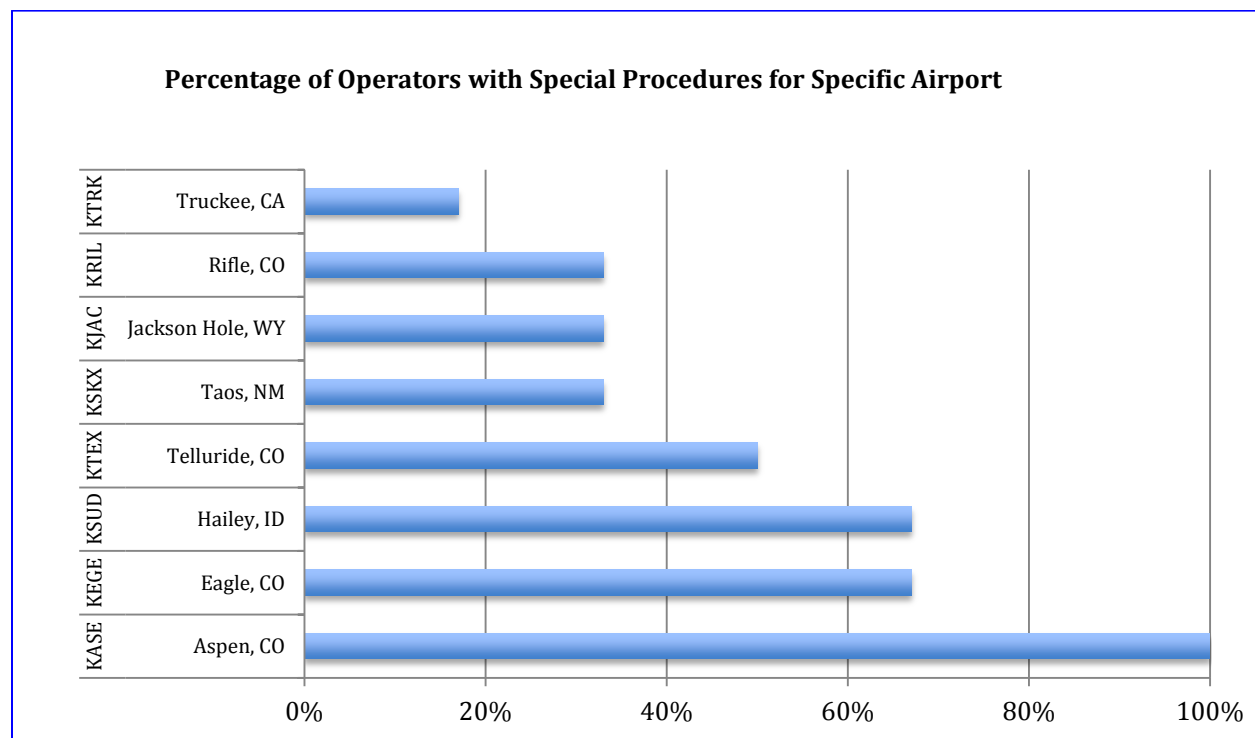
Almost every business aviation pilot has flown the approach into Aspen; if not an actual flight, then in the simulator. High profile accidents sensitized operators to the risks specifically associated with Aspen. Recently, we conducted a survey of operators in order to understand their risk mitigation practices with High Risk Airports. The participants in this survey represented operators:

- With more than one aircraft
- Fortune 500 Companies
- With Large Business Jet aircraft

67% of the operators in our survey used airport specific procedures. The airports identified by this group were:

Aspen, CO.  
Hailey, ID.  
Telluride, CO.  
Rifle, CO.

Eagle, CO.  
Taos, NM.  
Jackson Hole, WY.  
Truckee, CA.



Over 80% of those that defined specific restrictions limited the operations to “Daylight Only” and with higher weather minimums. Other restrictions included additional performance calculations and additional crew experience requirements.

The FAA identifies 32 airports for Part 121 Operators that require Special Authorization to use. These airports often require special procedures and crew training. A number of these airports are commonly used by business aircraft, but were not identified as high risk by our survey group.

- Palm Springs, CA.
- Durango, CO.
- Cody, WY.
- Burlington, VT.
- Asheville, NC.
- Burbank, CA.
- Ontario, CA.
- Reno, NV.

Consider reviewing your current operation and discussing the following:

- Review your current flight risk assessment tool and verify that it is capturing appropriate terrain issues. We all know that Aspen is risky, but does your tool flag the unique challenges of Asheville, NC. and Burlington, VT.?
- Identify the airports that require specific limitations and leadership oversight. Are there airports that should require a review by an individual in a safety or management position?
- Consider implementing terrain awareness in your current simulator training program. Surprising a crew with an EGPWS call during an approach may raise crew awareness.

- Review previous operations at these airports and ask yourself, “Should we have done this?”
- Consider developing your own Crew Certification standard for high risk airports.
- Review FAR Part 121.445 and consider adopting this list, or portions of this list as your high risk airports; both domestically and internationally.

FAR 121.445: <http://www.gpo.gov/fdsys/granule/CFR-2012-title14-vol3/CFR-2012-title14-vol3-sec121-445/content-detail.html>

List of Special Authorization Airports:

<http://fsims.faa.gov/PICResults.aspx?mode=Publication&doctype=OPSS%20Guidance>

Occasionally FAA links become obsolete, so we are including the instructions that will guide you to the Special Authorization List:

- 1) <http://fsims.faa.gov>
- 2) Click on “Publications,”
- 3) Click on “Operations Safety System (OPSS) Guidance,” and
- 4) Click on “OPSS QAL -- Special Pilot-In-Command Qualification Airport List.”

We would encourage Access Members to share unique insights or procedures in the Access Website Forum.

## REFERENCE

### **FAR 121.445**

Pilot in command airport qualification: Special areas and airports.

(a) The Administrator may determine that certain airports (due to items such as surrounding terrain, obstructions, or complex approach or departure procedures) are special airports requiring special airport qualifications and that certain areas or routes, or both, require a special type of navigation qualification.

(b) Except as provided in paragraph (c) of this section, no certificate holder may use any person, nor may any person serve, as pilot in command to or from an airport determined to require special airport qualifications unless, within the preceding 12 calendar months:

- (1) The pilot in command or second in command has made an entry to that airport (including a takeoff and landing) while serving as a pilot flight crewmember; or
- (2) The pilot in command has qualified by using pictorial means acceptable to the Administrator for that airport.

(c) Paragraph (b) of this section does not apply when an entry to that airport (including a takeoff or a landing) is being made if the ceiling at that airport is at least 1,000 feet above the lowest MEA or MOCA, or initial approach altitude prescribed for the instrument approach procedure for that airport, and the visibility at that airport is at least 3 miles.

(d) No certificate holder may use any person, nor may any person serve, as pilot in command between terminals over a route or area that requires a special type of navigation qualification unless, within the preceding 12 calendar months, that person has demonstrated qualification on the applicable navigation system in a manner acceptable to the Administrator, by one of the following methods:

- (1) By flying over a route or area as pilot in command using the applicable special type of navigation system.
- (2) By flying over a route or area as pilot in command under the supervision of a check airman using the special type of navigation system.
- (3) By completing the training program requirements of appendix G of this part.

**Special Pilot-In-Command Qualification Airports  
(14 CFR §121.445)**

Revised May 2013

**Revision History**

<b>Airport Changes</b>	<b>Change Document</b>	<b>Date of Change</b>
<b>Completely Revised List</b> per FAA-cancelled AC 121-445 and put OpSpec C050 into place	HBAT 03-07	October 16, 2003
<b>Added</b> – Thule Air Base, Greenland (BGTL)	N 8400.63	March 29, 2004
<b>Removed</b> – Russian airports: Domodedovo (UUDD), Moscow and Pulkovo (ULLI), St. Petersburg	N 8400.76	January 14, 2005
<b>Removed</b> – Chinese airport at Zhengding, Shijiazhuang (ZBSJ)	N 8400.86	November 23, 2005
<b>Added</b> – Ponce, Puerto Rico (TJPS)	N 8400.86	November 23, 2005
<b>Removed</b> – Chinese airports: Wuhan (ZHHH) and Nanjing (ZSNJ)	N 8400.88	April 4, 2006
<b>Removed</b> – All asterisks from Alaska airports and Adak Island (NAF), AK is now a public airport	No notice; asterisks were removed since they were left over in anticipation of the AC revision that was cancelled.	April 24, 2006
<b>Removed</b> – Russian airports: Yakutsk (UEEE) and Tolmachevo (UNNT)	N 8400.91	May 19, 2006
<b>Removed</b> – Russian airports: Minsk-2 (UMMS), Minsk, Belarus; Lviv (UKLL), Lviv, Ukraine; Simferopol (UKFF), Simferopol, Ukraine; Kyiv/Boryspil (UKBB), Kyiv, Ukraine; Kyiv (UKKM), Kyiv, Ukraine	N 8400.93	October 19, 2006
<b>Removed</b> – Chinese airports: Pudong (ZSPD), Shanghai, China; Zhengding (ZBSJ), Shijiazhuang, China (duplicate); Hongqiao (ZSSS), Shanghai, China; Binhai (ZBTJ), Tianjin, China	N 8400.93	October 19, 2006
<b>Added</b> – Gustavia III, (TFFJ), St. Barthelemy, Guadeloupe, French West Indies	N 8400.93	October 19, 2006
<b>Corrected duplications of Chinese airports</b>	No notice.	November 13, 2006
<b>Added</b> – Bagram Air Base, Afghanistan (OAIX)	N 8900.43	June 13, 2008
<b>Added</b> – Svalbard Airport, Norway (ENSB) <b>Removed</b> – Bratsk Airport, Russia (UIBB) and Irkutsk International Airport, Russia (UIII)	N 8900.79	June 26, 2009
<b>Removed</b> – Yekaterinburg International Airport, Russia (USSS)	Notification.	February 26, 2010
<b>Airport Changes</b>	Change Document	Date of Change

<b>Added – Mammoth Lakes, CA (KMMH) and Akureyri, Iceland (BIAR)</b>	N 8900.206	January 18, 2013
<b>Corrected errors (i.e., spelling, duplication) and aligned airport locations with codes for CIS and Chinese “exceptions” for readability.</b>	None	May 10, 2013

**Special Pilot-In-Command Qualification Airport List  
(Revised January 2013)**

**Table 1. United States Airports (Lower 48 States)**

<b>Special PIC Qualification Airport</b>	<b>ICAO ID</b>	<b>Distinctive Characteristics</b>	<b>Effective Date</b>
Ashville, NC	KAVL	Mountainous terrain.	06/20/90
Aspen, CO	KASE	Mountainous terrain in immediate vicinity of airport, all quadrants; high climb gradient performance requirements; special procedures.	06/20/90
Beckley, WV	KBKW	Mountainous terrain.	06/20/90
Binghamton, NY	KBGM	Mountainous terrain.	06/20/90
Bluefield, WV	KBLF	Mountainous terrain.	06/20/90
Bullhead City, AZ, Laughlin/Bullhead International	KIFP	Rapidly rising terrain (north, south, and west quadrants); high departure climb gradient performance requirements.	08/30/02
Burbank, CA	KBUR	Mountainous terrain.	06/20/90
Burlington, VT	KBTM	Mountainous terrain.	06/20/90
Butte, MT	KBTM	Numerous obstructions; no tower.	06/20/90
Charleston, (Kanawha), WV	KCRW	Mountainous terrain.	06/20/90
Cody, WY	KCOD	Mountainous terrain; no approach control; no tower; nonprecision approaches only.	06/20/90
Cumberland, MD	KCBE	Mountainous terrain.	06/20/90
Durango, CO	KDRO	High terrain; no radar.	06/20/90
Eagle, CO	KEGE	Mountainous terrain; high climb gradient performance requirements.	06/20/90
Elmira, (Chemung), NY	KELM	Mountainous terrain.	06/20/90
Flagstaff, AZ	KFLG	Mountainous terrain.	06/20/90
Gunnison, CO	KGUC	Uncontrolled; numerous obstructions in airport area; complex departure procedures.	06/20/90
Hailey, ID (Friedman Memorial)	KSUN	Mountainous terrain; special arrival/departure procedures.	06/20/90
Hayden, Yampa Valley, CO	KHDN	Mountainous terrain; no control tower.	06/20/90
Hot Springs, VA	KHSP	Mountainous terrain.	06/20/90
Huntington, WV	KHTS	Mountainous terrain.	06/20/90
Jackson Hole, WY	KJAC	Mountainous terrain, all quadrants; complex departure procedures.	06/20/90
Keene/Dillant-Hopkins, NH	KEEN	Mountainous terrain.	06/20/90
Klamath Falls, OR	KLMT	Mountainous terrain.	06/20/90
Lebanon Regional, (Lebanon), NH	KLEB	Mountainous terrain.	06/20/90
Mammoth Lakes, CA	KMMH	Mountainous terrain; limited maneuvering area.	01/18/13
Missoula, MT	KMSO	Mountainous terrain.	06/20/90
Ontario, CA	KONT	Mountainous terrain.	06/20/90

Palm Springs, CA	KPSP	Mountainous terrain.	06/20/90
Pinal Airpark, (Marana), AZ	KMJZ	Mountainous terrain.	06/20/90
Reno, NV	KRNO	Mountainous terrain.	06/20/90
Rifle/Garfield County Regional, CO	KRIL	Mountainous terrain.	06/20/90
Roanoke, VA	KROA	Mountainous terrain.	06/20/90
San Diego, CA	KSAN	Rising terrain close to runway.	06/20/90
San Francisco Intl, CA	KSFO	Mountainous terrain.	06/20/90
Special PIC Qualification			Effective
Saranac Lake, NY	KSLK	Mountainous terrain.	06/20/90
Shenandoah Valley, VA	KSHD	Mountainous terrain.	06/20/90
South Lake Tahoe, CA	KTVL	Mountainous terrain.	06/20/90
Telluride, CO	KTEX	Mountainous terrain.	06/20/90
Washington, DC (National)	KDCA	Special arrival/departure procedures.	06/20/90
West Yellowstone,	KWYS	Mountainous terrain.	06/20/90

**Table 2. United States Airports (Alaska and Hawaii)**

Special PIC Qualification Airport	ICAO ID	Distinctive Characteristics	Effective Date
Dutch Harbor, (Unalaska), AK	PADU	Mountainous terrain.	06/20/90
Hilo Intl (General Lyman Field), HI	PHTO	Mountainous terrain.	06/20/90
Juneau, AK	PAJN	Mountainous terrain.	06/20/90
Kahului, HI	PHOG	Mountainous terrain.	06/20/90
Ketchikan, AK	PAKT	Mountainous terrain.	06/20/90
Kodiak, AK	PADQ	Mountainous terrain.	06/20/90
Kulik Lake Airport, AK	PLKK	Mountainous terrain.	08/30/02
Lihue, Kauai, HI	PHLI	Mountainous terrain.	06/20/90
Petersburg, AK	PAPG	Mountainous terrain.	06/20/90
Red Dog, AK	PARD	Mountainous terrain.	08/30/02
Sand Point, AK	PASD	Mountainous terrain.	06/20/90
Seward, AK	PAWD	Mountainous terrain (no approach).	06/20/90
Sitka, AK	PASI	Mountainous terrain.	06/20/90
Valdez, AK	PAVD	Mountainous terrain.	06/20/90
Wrangell, AK	PAWG	Mountainous terrain.	06/20/90

**Table 3. United States Airports (Military Airports)**

Special PIC Qualification Airport	ICAO ID	Distinctive Characteristics	Effective Date
Adak Island, AK	PADK	Mountainous terrain.	06/20/90
Cape Lisburne (LRRS), AK	PALU	Mountainous terrain.	06/20/90
Cape Newenham (LRRS),	PAEH	Runway located on mountain slope with high gradient	06/20/90
Cape Romanzof, AK	PACZ	Mountainous terrain.	06/20/90
Indian Mountain (LRRS),	PAIM	Mountainous terrain.	06/20/90
Sparrevohn (LRRS), AK	PASV	Mountainous terrain.	06/20/90
Tin City (LRRS), AK	PATC	Mountainous terrain.	06/20/90
Thule, Greenland	BGTL	Navigation and approach facilities are oriented to True	03/12/04
Bagram Air Base,	OAIX	Controlled explosions and de-mining operations in	06/13/08

**Table 4. European Airports**



Special PIC Qualification Airport	ICAO ID	Distinctive Characteristics	Effective Date
Akureyri, Iceland	BIAR	Terrain; high rate of descent required on Localizer (LOC)/ distance measuring equipment (DME); engine-out missed approach capability limited by terrain.	01/18/13
Sondre Stromfjord AB, (Kangerlussuaq) Greenland	BGSF	Mountainous terrain.	06/20/90
Svalbard Airport, Svalbard/Longyearbyen, Norway	ENSB	Rapidly rising terrain to the north, south, and east.	06/26/09

**Table 5. China (PRC) Airports**

Special PIC Qualification Airport	ICAO ID	Distinctive Characteristics	Effective Date
All Airports in the People's Republic of China  <i><b>EXCEPT:</b> Beijing Capital Shijiazhuang Zhengding Tianjin Binhai Guangzhou Shenzhen Huangtian Wuhan Hangzhou-Jianqiao Nanjing Shanghai-Pudong Shanghai-Hongqiao Harbin Dalian</i>	All Airports  <i><b>EXCEPT:</b> ZBAA ZBSJ ZBTJ ZGGG ZGSZ ZHHH ZSHC ZSNJ ZSPD ZSSS ZYHB ZYTL</i>	Limited information.	10/19/06

**Table 6. Commonwealth of Independent States (CIS) Airports**

**Note:** Member countries include: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

Special PIC Qualification Airport	ICAO ID	Distinctive Characteristics	Effective Date
All Commonwealth of Independent States (CIS), formerly the Soviet Socialist Republic (USSR) Airports  <i><b>EXCEPT:</b> Yakutsk, Russia Tiski, Russia Khabarovsk, Russia Anadyr, Russia Pevek, Russia Yuzhno, Russia Vladivostok, Russia Bratsk, Russia Irkutsk, Russia Simferopol, Ukraine Kiev/Boryspil, Ukraine Kiev/Gostomel, Ukraine Lviv, Ukraine Archangel, Russia Saint Petersburg/Pulkovo Murmansk, Russia Minsk-2, Belarus Novosibirsk/Tolmachevo Yekaterinburg, Russia Moscow/Domodovovo Moscow/Sheremetyevo Moscow/Vnukovo</i>	All Airports  <i><b>EXCEPT:</b> UEEE UEST UHHH UHMA UHMP UHSS UHHW UIBB UIII UKFF UKBB UKKM UKLL ULAA ULLI ULMM UMMS UNNT USSS UDDD UUEE UUWW</i>	Limited airport information; lack of accurate Notice to Airmen (NOTAM) information; unique local procedures; local weather conditions/weather reporting; language/accents; Mountainous terrain.	02/26/10

**Table 7. Caribbean Airports**

Special PIC Qualification Airport	ICAO ID	Distinctive Characteristics	Effective Date
Fort De France, Martinique	TFFF	Mountainous terrain.	06/20/90
Guantanamo Bay, Cuba	MUGM	Unique approach requirements; limited maneuvering airspace due to politically sensitive territorial boundaries.	06/20/90
Pointe-A-Pitre, Guadeloupe	TFFR	Mountainous terrain.	06/20/90
Ponce, Puerto Rico	TJPS	High terrain to the north and numerous manmade obstacles.	11/28/05
Santa Domingo, Dominican Republic (Las Americas)	MDSD	No radar environment; prohibited area and San Isidro Air Base northeast of field.	06/20/90
St. Maarten I, Neth Antilles (Phillipsburg)	TNCM	Mountainous terrain.	06/20/90
St. Thomas I, Virgin Is (Charlotte Amalie)	TIST	Mountainous terrain.	06/20/90
E.T. Joshua, Lessor Antilles (St Vincent)	TVSV	Mountainous terrain.	04/26/05

Gustavia III, TFFJ, St. Barthelemy, Guadeloupe, French West Indies	TFFJ	Severe mountainous terrain hindering an approach to both Runway 10 and Runway 28. Departure on 28 is prohibited. French Civil Aviation Authority requires a special flight check from an authorized individual and a signoff to all crewmembers that fly commercially into this airport.	10/19/06
--	------	--	----------

**Table 8. Central American Airports**

Special PIC Qualification Airport	ICAO ID	Distinctive Characteristics	Effective Date
Guadalajara, Mexico	MMGL	Mountainous terrain.	06/20/90
Guatemala City, Guatemala	MGGT	Mountainous terrain.	06/20/90
Loreto Int'l, Mexico	MMLT	Mountainous terrain.	08/30/02
San Jose, Costa Rica	MROC	Mountainous terrain.	06/20/90
Tegucigalpa, Honduras	MHTG	Mountainous terrain.	06/20/90

**Table 9. South American Airports**

Special PIC Qualification Airport	ICAO ID	Distinctive Characteristics	Effective Date
Bogota, Colombia (Eldorado International)	SKBO	Mountainous terrain.	08/30/02
Cali, Colombia	SKCL	Mountainous terrain.	08/30/02
La Paz, Bolivia	SLLP	Mountainous terrain.	06/20/90
Arequipa, Peru	SPQU	Mountainous terrain.	05/15/03
Pasto, Colombia (Antonio Narino)	SKPS	Mountainous terrain.	08/30/02
Pereira, Colombia (Matecana)	SKPE	Mountainous terrain.	08/30/02
Quito, Ecuador	SEQU	Mountainous terrain; complexity of arrival and departure procedures.	06/20/90
Rio De Janeiro, Brazil (Galeao)	SBGL	Mountainous terrain; complexity of approaches.	06/20/90

**Table 10. Pacific Airports**

Special PIC Qualification Airport	ICAO ID	Distinctive Characteristics	Effective Date
Fukuoka, Japan	RJFF	Mountainous terrain.	06/20/90
Hong Kong International, Hong Kong, PR of China	VHHH	Mountainous terrain.	06/20/90
Pago Pago, Tutuila Island, United States (American Samoa)	NSTU	Mountainous terrain.	06/20/90