



Qualifications

Highlights

During the climate challenge, our involvement is tending to all season operation and related studies making fitting **modifications, new development and diversify** existing areas. Following recent lift capacity increases we are also called to assist ski areas with circulation analyses and **complex mountain grading projects**. Internationally, Alpentech is best known for **prudent mountain resort planning and development** taking place most recently in China.

Based on a solid engineering foundation, Alpentech has involved with to the ski industry during the last 40 years. Alpentech gained practical experience from the ground up, applying invaluable field experience. A National Award was received for best ski area layout, a Regional (Golden Wrench) Award for best service and a County Award for sound water quality management practices.

Locally, numerous large grading projects were drawn for Alta, Brighton, Snowbird, Solitude aimed at better skier circulation and distribution. We have been commissioned to provide a master plan for Nordic Valley and make a Third Party Economic Feasibility Study at SnowKing Resort in Jackson, Wyoming in 2012, prior to submitting complete all-season master plan update. A 5000 acre all season mountain plan layout for Liberty University culminated in the construction of a Snowflex installation which has met all expectations for over 8 years.

New development is benefiting from a unique modeling techniques used during mountain resort layout and planning since 1982. It was a pilot project for including terrain suitability and wind modeling provided to the French government and became our trademarked **Smartmap** analysis. Simplified versions are currently used in China to find more suitable ski slopes. In addition to advanced map analysis, our forte is fitting venue layout in the field, working with Google Earth and state of art tools. Smarter adjustment to changing markets of summer and winter sport in mountains is indeed the objective for many of our planning engagements. In recognition of his work, the founder of Alpentech was inducted into the Intermountain Ski Hall of Fame in 2012.

A rich history of our involvement is posted at www.alpentech.com



Alpentech is well known for fundamental research, land suitability evaluation and looking more creatively at master planning. The scope of our involvement has focused on mountain planning, particularly trail modifications for “over-lifted” mountains. With focus on the need of lower level skiers and snowboarders, widening and new trail creation the “joy of snow sports” has been improved in recent projects. **Complex grading projects have become a specialty.** Engineered cuts and fills, drainage, storm water management, lift terminal area and mass grading, soil sediment and erosion control plans, parking lot design, mountain roads and trails are subjected to landscape integration. Field fitting design is a specialty.



Combining summer and winter mountain use has become a mandatory planning objective for new uphill facilities; therefore, an increasingly international /resort clientele is appreciating to find learning and skiing space, as well as the larger mountain trill to make the stay memorable. The scope of inquiry has new boundaries and results in more creative evaluation of options within the bounds of the mountain. **Our skill is to correctly lay out future mountain uses and base areas.** We anticipate a harmonious carrying capacity for keeping recreation pleasant and affordable thanks to efficient layout that will affect realistic initial investment and modest operating costs. Product evaluation is provided without the overtone of equipment sales staff. Where possible, ski and summer trail layout is established before optimally locating and sizing lifts. - Our practice of ski area planning and engineering is based on research, using life-cycle and market assessments to evaluate sustainability.

While the bulk of smaller projects remains in the U.S., our extended experience in mountain planning, civil- and environmental engineering, landscape integration, natural resource evaluation and modeling resulted in a superior outcome abroad. A “second generation planning approach” with new and smarter focus on all season development brought international assignments in Argentina, Canada, China, France, Korea, New Zealand, Spain and Switzerland.



Alpentech has been recognized with awards for design excellence that is well integrated in the natural environment. Larger mountain work is anchored in terrain modeling, hydrology and weighing of environmental parameters. Effective presentation of projects today relies on Google Earth, allowing 3D viewing. Optimal land use is dependent on available Geographic Information Systems (GIS) and accurate location site locations by GPS, allowing to verify impacts and avoid pitfalls and thereby rendering master plans reliable and defensible.

While specializing on the mountainside, we are also familiar with all aspects of base area and circulation and utility planning. Precision trail and track design for summer venues is of growing interest and can be best met with our technical interface with suppliers of slides, rides, coasters, zip lines, etc.

Better balancing seasonal mountain activities promises a more sustainable resort master plan. We maintain cost effective methods of analysis and rely on field verification. We focus on using the advantage of the natural condition for recreation and living spaces. We help to interpret and meticulously map and study these conditions, in order to justify the footprint of proposed actions. Graphic interpretation of factors affecting land use decisions via modeling is a special service that no other company has similarly perfected.

We are familiar with stream, wetland and other regulations and hillside ordinances to prepare specific permit applications and master plans that implement sustainability.

Scope of Services

Since mountain planning consists of many aspects of professional analysis, Alpentech has been asked to contribute items listed below, or has provided complete Mountain Master Plans. At each step of the way, we have provided unique and flexible services to the mountain recreation industry, at a fair cost, such as:

- all-season trail layout and design
- avalanche studies
- civil engineering and surveying
- climate analysis
- comfortable site capacity evaluation
- ecologically wise planning
- economic feasibility analysis
- expert witness
- GPS surveys (sub-meter level)
- grading plans
- illustrations and mapping
- laser survey inventory
- legal descriptions
- modeling: suitability and hazards
- mountain road design
- NPDES Natl. Pollution Elimination System
- operational studies
- parking lot design
- reconnaissance studies
- rehabilitation
- ski trail capacity evaluation
- soil sediment/ erosion control plans
- snowmaking studies
- stream alteration permitting
- site and subdivision planning
- storm water management
- summer slide and ride layout
- terrain modeling (3D graphics)
- terrain park planning and grading
- third party analyses
- wetland creation
- zoning proposals

Agencies and resorts that are knowledge-based hire us to create:



- **Alternative transport system studies:** Alpentech founder's roots in the Bernese Oberland in Switzerland, give rise to interesting comparisons leading to revision of energy/ efficiency and sustainability concepts, significantly reducing carbon footprint and better water quality management.
- **Base Site Plans:** typically providing congregation area layout, cross section analyses, ingress/ egress circulation, parking, drainage, grading, etc. with landscape consideration.
- **Mountain Master Plans:** Lift and trail capacity, terrain parks, avalanche control, adventure access, summer and winter utilization, etc. Invariably, Alpentech involvement resulted in substantial increase of use and revenue and has brought recognition and design awards.
- **Multi-season Plans:** Gravity parks, terrain parks, bike trails, climbing walls, summer slides/ carts, high ropes, artificial skiing surfaces, etc. Alpentech has participated in layout and planning of the first all season Snowflex ski facility as a part of a recreation development plan near a U.S. University.
- **Resort activity and adventure mapping:** Alpentech has 30 years of special map and poster production experience. The most successful example is the Bryce Canyon hiking map with over 40,000 copies sold. The Wasatch Touring map series, which illustrate hiking, mountain biking, climbing, and winter backcountry touring, are in 2nd and 3rd printing. Two new touring maps for the Southern Wasatch are currently in production to ease the congestion of the Central Wasatch.

- **International Comparisons of Opportunity spectrum**



Since January 1, 2015, Alpentech GmbH operates a Swiss Branch Office focusing on comparative analysis and International Business.

The Alpentech Welcome Center, is available for small focus groups to learn from the Swiss how to approach sustainable development and adapt plans for the long term. Selected European Alpine resorts are offered to provide effective comparative analysis per interest group.

Staff and Associates**Beat vonAllmen**

P.E., President, Mountain Planning Engineer, beat@alpentech.net

GENERAL

Beat incorporated Alpentech in 1978 to improve the experience of summer and winter vacationing in the mountains. Having grown up in Mürren, a car free Swiss resort, and working for aerial tramway firms, he became a hands-on specialist in mountain transportation systems. Building on his background, fitting professional education and experience, the evolution and accessibility of alpine summer and winter sports has been the primary focus of his work. Searching for better, more comprehensive mountain use has awarded him recognition in recreation planning. This special interest, coupled with studies in mechanical, civil and environmental engineering give Beat a leading edge in mountain facility layout by combining his field advantage with advanced computer modeling, Beat is the U.S. correspondent to the International Aerial Tramway Review. Fluent also in French and German, he has written numerous articles on subjects related to mountain development and has pioneered suitability and hazard modeling since 1981, trademarked as "smartmaps". In 2003 Beat (Bayot) has been awarded the Golden Award of the Intermountain Ski Area Association. In 2009 he was elected as a technical advisor for the Wasatch Canyons Master Plan. In 2012 he was inducted in the prestigious Intermountain Ski Hall of Fame. In 2015 Alpentech GmbH, a wholly owned company was registered in Switzerland to conduct all international business, including vacation home management in Mürren. This facilitates welcoming clients for small conferences in Beat's unique mountain resort (see www.chaletsnowbird.com).

As a member of the Swiss National Ski Team, Beat listed in the first 15 FIS list and has won several international events. In the 1964 Olympic Winter Games at Innsbruck, Austria, he placed 14th in Giant Slalom. He keeps enjoying the famous Utah powder with his spouse after bringing up two ski racing daughters.

EDUCATION

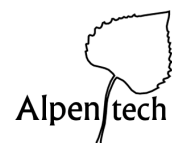
MS Civil Engineering -- University of Utah, Salt Lake City, 12/1973
 MS Mechanical Engineering -- University of Vermont, Burlington, 6/1971
 Design Engineer (HTL-Maschinenbau) -- State College, Biel, Switzerland, 1968
 Draftsman Diploma (Maschinen) -- vonRoll AG / Gewerbe Schule, Bern, CH 1964
 Swiss Army -- Alpine Corps training, mountain infantry corporal, 1962/63
 Business Administration Diploma -- Nobs & Co. / K.V., Thun, Switzerland, 1961

REGISTRATION + HONORS

Professional Engineer: P.E. Utah (4838) 22-156074-2202, Utah Tramway Engineer
 2012 Intermountain Ski Hall of Fame
 1990 National Ski Area Design Award – First Place

RELATED EXPERIENCE

Founder of Alpentech, Inc.: Responsible for Alpentech projects since 1984
 Project Manager: vonAllmen & Partners, Salt Lake City, Utah, 1971-83
 Correspondent: International Tramway Review, Vienna, A, since 1982 and
Motor im Schnee, Stein Verlag, Baden-Baden, Germany 1989-1992
 National Avalanche School: Reno, NV, 1975
 Associate -- Enteleki (Resort Architects), Salt Lake City, UT, 1972-73
 Mountain Planning Assistant: Greater Park City Company, 1972
 Tram Erection Crew: Snowbird, Utah 1971
 Tooling Design: Hirschman Corp., Roslyn Heights, NY, 1968-70
 Technical Design: vonRoll Bern, Switzerland; ropeway drafting/ design apprentice 1962-66
 Business administration training -- Nobs & Co., Thun, Switzerland, 1958-61



AFFILIATIONS

ASCE: American Society of Civil Engineers, current. Urban Planning and Development Division – Recreation Planning Committee; Chairman 1988/89
NSAA: National Ski Areas Association, current.

SELECTED PUBLICATIONS AND PRESENTATIONS

"Trail Capacity Adjustment" in development; "Planners with a Vision" Si-magazine; "How to measure trail capacity" OITAF-NACS 7th and 8th Symposiums; "Dispersing Skiers and Riders" Si-magazine; "Grindelwald: modernity vs. history"; "Linking Salt Lake City with six mountain resorts" (cog-railway option) International Conference, Urban Transportation Division of ASCE; "L'analyse des sites par procedes informatiques"; "Pulse Lifts: A contrarian choice"; "Impacts of Detachables"; "Modernisieren im Westen (Big Mountain, MT, Kellogg, Sun Valley, ID and Solitude UT)"; "Keystone Gondola, made in USA"; A consultant's view of master planning, Forest Service, Brighton, Utah; "Digital Wind Models Applied to Ski Area Planning and Operation"; "Avalanche Control from Afar"; On ski area carrying capacity, Innsbruck; "Lift Alignment Techniques"; "On computer generated maps"; "Aligning with Lasers" (solar bending of tubular towers); "Skiing resource evaluation by computers"; "The Heritage Mountain Funicular"; "Snowbird Skier Circulation"; "Sliding Control of Ski Garments"; "Skiing Dynamics"; "Access to Mountain Recreation"; "How to measure and rectify ski area crowding"; Mountain Recreation: Energy vs. Mobility, ASCE; "Chair Lift Erection by Helicopter"; "Unzweckmässige Bekleidung: als Unfallgefahr beim Skilaufen"; "Die Textilbremse auf Schnee".

Nicolas Bianchi

Project engineer

GENERAL

Holder of a two-year university degree in civil engineering, a three-year degree in civil engineering (CAD), a three-year degree program in management and a master's degree in trades of the mountain, Nicolas has acquired a very thorough knowledge of mountain planning, through a multidisciplinary teaching based on: management, environment, planning, sustainable tourism and sport-recreation.

He learned how to use CAD and GIS in professional situations through several internships and jobs in different companies.

Through his mountain knowledge and his attraction to new technologies, he brings technical proficiencies, creativity, originality and autonomy. His youth, dynamism and motivation, heightened by his ability of rapid integration create an important value.

Nicolas grew up in a progressive Alpine environment and is eager to engage in ski area planning, modification, new area planning and diversification of mountain resorts. He is also a licensed ski and snowboard instructor which brings his attention naturally to the practice of teaching, which is the most fundamental concern in successful resort layout and development.

EDUCATION

Master degree "Trades of the Mountain", Aix Marseille University, Gap, France – 2015 to 2017, culminating his 3-yr. resident degree in management "Trades of the Mountain", 2014; his 3-yr. degree in technical drawing in civil engineering (CAD) at the Montpellier University, Nimes, France – 2013 and his 2-yr degree in civil engineering, at the Joseph Fourier University, Grenoble, France – 2010 to 2012

PROFESSIONAL EXPERIENCE

Internship and technician draftsman – DIANEIGE (touristic mountain design) – May to Oct. 2012
Language study vacation – INTRAX, San Francisco – June to September 2013
Ski and snowboard instructor – La Plagne, France – December 2013 April 2014



Internship in architect office specialized in mountain area – ATM – May to August 2014
Internship and temporary contract as project engineer – MDP CONSULTING – Feb.-Dec. 2017
Ski and snowboard instructor – La Plagne, France – December 2017 April 2018

Zachary S. Thompson

Mountain Planning Assistant, zach@alpentech.net

GENERAL

Zach comes from a diverse background within the ski industry. As an employee for Alta ski Lifts over the last ten years, he has done everything from mountain grooming operations to Avalanche Mitigation using the 105mm Highway Howitzer. He is an American Avalanche Association Level III practitioner and member of the Alta Ski Patrol. Prior to his time at Alta he lived in Wyoming where he was the Director of mountain bike trail development at White Pine Ski Resort. His experience with trail development and understanding of mountain operations has led him to Alpentech to further his approach to responsible trail and resort development. He is a year round resident of Alta.

PROFESSIONAL EXPERIENCE

Alta Ski Area – Ski Patrol, Mountain Ops. 2008-Present
Utah Department of Transport- Avalanche Forecaster, 2013-Present
White Pine Ski Area- Director of Mountain Biking, 2005-2009
American Avalanche Association Level III, 201721
International Snow Science Workshop attendance, 2010 14' 16'

EDUCATION

Zach has simultaneously been pursuing his bachelor degree in Commercial Recreation Management at the University of Utah. He will graduate in the spring.

Gary Peck

Forestry Consultant, Mountain Planning Assistant

GENERAL

Layout of new ski trails with the practical understanding of a professional logging background can make a difference as Gary Peck has proven while working with Alpentech over the years. Gary helped to create over 400 acres of new trails in Montana, Washington and British Columbia. More recently, he assisted in layout of new ski trails and mountain roads in China. Gary Peck delivers ski area specific Forest and Vegetation Management plans knowing logging practice, timber value, fire, esthetics, and recreational enjoyment all at the same time. Gary's forestry expertise is particularly valuable to prepare mountain management plans aimed at forest health and lower fire hazard that positively influence ski area sustainability. His dedication to apply high environmental standards for logging and his love for ski trail layout combine to create an unusual asset for Alpentech. Gary has been working with Alpentech for over 20 years on new mountain development and ski trail creation.

EDUCATION

Certified Forest Service Cruiser - 1980 and 1983
BS Forestry - University of Massachusetts, Amherst, MA - 1979
Graduate - Andover High School, Andover, MA -1973

RELATED EXPERIENCE

Forestry Consultant—Owner, 1992 to present
Forester--Plum Creek Timber Co. 1985-1992
Forest Technician--Gallatin and Targhee National Forests 1980...1985



ALPENTECH PROJECTS

DESTINATION RESORTS

2017 ...	<i>Silk Road Resort, Ping Xi Liang Village. Nan Shan Grasslands, Urumqi, China</i>
1987...	<i>Snowbasin Ski Area, mountain plan, engineering, Sinclair Oil Co., UT</i>
1976-2016	<i>Solitude Ski Resort Co., mountain planning, engineering, Salt Lake City, UT</i>
2008-15	<i>Nordic Valley, Complete Expansion Plan, w/ DGA, Paris, UT</i>
1971-14	<i>Snowbird Corporation, mountain planning, engineering, Snowbird, UT</i>
2005-09	<i>Valle de Las Leñas, mountain development plan, w/ HMA, Argentina</i>
2006/07	<i>Chapelco, mountain development plan, resort company, Argentina</i>
1987-07	<i>Sun Valley Company, mountain plan, engineering, Sun Valley, ID</i>
2005/06	<i>Apex Mountain Resort, mountain plan, engineering, Penticton, B.C.</i>
2004/05	<i>Silver Mountain, Kellogg, mountain plan, engineering, ID</i>
2001-02	<i>The Colony at Whitepine Canyon, mountain/ RR transit planning, UT</i>
1989-98	<i>Big Sky, Ski & Summer Resort, Boyne USA, mountain plan, engineering, MT</i>
1997/98	<i>Schilthornbahn AG, Interlaken, ski trail grading plan, Switzerland</i>
1995/96	<i>Wolf Mountain (now Vail), mountain plan, engineering, Park City UT</i>
1995/96	<i>Northstar at Tahoe, mountain planning, Truckee, CA</i>
1993-96.	<i>Ski Moonlight, (Big Sky North), mountain plan, engineering, Big Sky, MT</i>
1993-96	<i>Brundage Mountain Company, mountain plan, engineering, McCall, ID</i>
1992-94	<i>Aspen Highlands, mountain plan, engineering, CO</i>
1984/93/97	<i>Park City Ski Area and Park City Alpine Slide, UT</i>
1983	<i>Crystal Mountain/Brian Head, mountain plan, engineering, Cedar City, UT</i>
1981/83	<i>Ski lift Interconnect, Utah Ski Association, S.L.C., UT</i>
1982	<i>Val Thorens, French Government, Challes-les-Eaux, France</i>
1981	<i>Snowbasin/Trappers Loop Ltd., mountain plan, w/ Seibert, UT</i>
1980	<i>Squaw Valley, mountain plan, CA</i>
1976	<i>Solynieve, Spain; mountain plan, w/ Kiley/Walker, Charlotte, VT</i>
1971/72	<i>Bald Mountain, mountain planning, engineering, Greater Park City Co., UT</i>

DAY SKI AREAS

2017...	<i>Pebble Creek Ski Area - Upgrading plans for new owners, UT</i>
2015...	<i>Wujin, ski area expansion - Ttiss Global Outdoor Sports Group Ltd., China</i>
2009...	<i>Magic Mountain, ski area master plan update, Twin Falls, ID</i>
1988...	<i>Pomerelle Ski Area, Albion, ID</i>
1987...	<i>Brighton Resort, CNL Income Brighton LLC/ Crystal Mtn., UT</i>
2012-14	<i>SnowKing Mountain Resort, all season expansion plan, Jackson, WY</i>
1998-14	<i>Belleayre Mountain, New York State Department of Conservation, NY</i>
1991-14	<i>Soldier Mountain Ski Area, mountain planning, engineering, Fairfield, ID</i>
1996-2009	<i>Crystal Mountain Resort, mountain planning, engineering, WA</i>
2007/08	<i>Erner Galen Reconnaissance, Mühlebach, VS, Switzerland</i>
2004-06	<i>Ausblick, Inc., ski area vertical expansion, Hartland, WI</i>
2004-05	<i>Enviroserve Associates, LLC, Powder Mountain, UT</i>
2002-05	<i>Snow Haven, Idaho, City of Grangeville, D</i>
2001-05	<i>Montana Snowbowl, mountain plan, Missoula, MT</i>
1999	<i>Crystal Mountain, mountain planning, engineering, Kelowna, B.C.</i>
1995	<i>Las Vegas Ski and Snowboard Resort at Lee Canyon, V</i>
1993-98	<i>Pebble Creek Ski Area, Pocatello, ID</i>
1993	<i>Intermountain Region U.S. Forest Service: Lee Canyon Capacity, UT</i>
1993	<i>Kelly Canyon, ID</i>
1992/93	<i>SnoBowl, City of Elko, NV</i>
1991	<i>Evanston Parks & Recreation Department, Evanston, WY</i>



40th-year Qualifications

1989-1991	Six ski areas in Ontario, D.R. Matthews Assoc., Canada
1988/89	Crystal Mountain, Meeks Assoc., WA
1988/89	Ski Wolf Laurel, Inc.
1984/85	Showdown Ski Area, Neihart, MT
1984/85	Mount Lemon, Tucson, NM
1983/84	Red Lodge Mountain, Red Lodge, MT
1983/84	Slide Mountain, Mount Rose, NV
1982	Fairbanks Area, Department of Natural Resources, AK
1980/81	Nordic Valley Ski Area, Skiing Associates, Eden, UT
1980/81	Parkwest Ski Area, Snyderville, UT

NEW RESORT PROJECTS

2016...	LaoHuGou - TTiss Global Outdoor Sports Group Ltd. TTiss, Urumqi, China
2015...	Shanxi Taihang Shan master plan, engineering, w/ HMA, TTiss, China
2012...	All Season Resort Connection, Alta-Brighton-Solitude, in-house project, UT
2004...	Loafer Mountain, master planning 10/000-acres, 5100', JM Land Group, UT
1998...	Wasatch Peaks (Gaily) Ranch master plan (12'000-ac. 4600'), UT
2017	Chicheng County Ski Area Design Contest, Beijing, China
2013-15	Un-disclosed area resort project, Patey, Salt Lake City, UT
2011-14	Sunrise Mountain Ranch, hydro power mountain design, Patey, UT
2010-12	Lantian Lake master plan, Chongqing, Jiulongpo Dist., w/ HMA, China
2010	Guangling 603 Ski Project master plan, Mr. Gu, w/ HMA, Shanxi, China
2010	Chongli, smartmap, Beijing Raissun Investment Co., w/ HMA, China
2010	Pingquan mountain reconnaissance, w/ Dunn+Kiley, Hebei, China
2009-10	Alta Railway engineering feasibility, Envision Utah, Salt Lake City, UT
2009-10	Independence Resort, research, planning, engineering, UT
2007-10	Black Bear Resort, 5000-acre resort planning/ engineering, Paris, ID
2006-09	Soldado, Las Leñas, expansion plan, VLL, w/ HMA, Argentina
2009	Qiaoshan ski area project review, undisclosed, Hebei, China,
2008/09	Huatian Zhangbei, Xiannadu master plan, w/ Dunn+Kiley, Hebei, China
2006-08	Liberty University, Mountain Recreation Master Plan, Lynchburg, VA
2005-09	Blue Diamond, ski resort/ Forest Service land trade, Ely, NV
2007	Timberland Reconnaissance, 15,000 acre skiable reconnaissance, OR
2006/07	Grandeur Peak, 10000-acre critique, Bountiful City, UT
2006	Dong Ling Shan, mountain plan critique, I-STAR, Hebei, China
2006	The Canyons Ski Area Analysis, Paul Hastings Attorneys, New York, UT
2005	Bear Mountain, resort planning/ engineering, w/ Design Workshop, ID
2004-05	Malans Basin, Ogden side of Snowbasin, Chris Peterson, UT
2004	Jumbo-Farnham, critique of the Jumbo Project, Lev/ vonAllmen, Canada
2001-03	K38 Project, 2 sites, mountain recreation planning, Bountiful City, UT
2000	Ski Lava Project, ski area plan, Randy Seed, Lava Hot Springs, ID
2000	Dyer Mountain-Lake Almanor, ski area master plan, Peter Hicks, CA
2000	Oak Valley, reconnaissance, Jim Bass, South Korea
1990-94/99	Jumbo Glacier Resort, grandiose study, Oberto Oberti, B.C., Canada
1999	Ling San Mtn. resort layout, Brighton Co., Richard Bass, China
1997/98	Kohap/ Sabuk Proposal, Korea, master plan w/ EDAW, San Francisco, CA
1996-97	Hyosung Group, 20 mountain resort feasibility study, South Korea
1995-97	Yellowstone Mountain Club, ski area layout, Big Sky Lumber, MT
1996	Brohm Ridge critique for B.C. Lands, w/ Goldner Assoc., Canada
1995-96	Hyosung, ski resort master plan w/ Zehren Associates, South Korea
1995	Kae-Ta, Resort ski resort proposal w/ EDAW, South Korea
1994/95	Alpine Land Co., Steamboat, mountain planning, CO
1994/95	Velocity Peak, Silverton, mountain planning, engineering, CO



40th-year Qualifications

1992-94	Granite Peak/Slab Butte, reconnaissance study, Brundage Mtn., ID
1992/93	SnoBowl, Community Ski Area, mountain planning, engineering, Elko, NV
1991-93	Trans-Wasatch Company (Telemark Park), engineering, Park City, UT
1991/92	Lolo Peak Economic Research Committee, planning, Missoula, MT
1991	Cayoosh Reconnaissance, NGR Resort Consultants, study, Whistler, B.C.
1988/89	Hatcher Pass, for AK-DNR, master plan, w/ LDN, Anchorage, AK
1988	Cold Stream Project, preliminary ski area master plan, Truckee, CA
1987, 93/94	The Ridge Corp., ski area master plan, Coolfont, Berkeley Springs, WV
1986/87	Independence, ski area master plan, Kirk Wickersham, Anchorage, AK
1986	Razis, smartmap, ski area layout, Michel Guerrin, St. Ismier, France
1985/86	College Mountain master plan, engineering, Ski Roundtop, Inc., PA
1984	Sedgwick Peak, master plan, engineering, Ski Lava, Inc., Lava Springs, ID
1984/85	East Fork, preliminary master plan, Pagosa Springs, CO
1984/85	Priest Lake, preliminary master plan, CWS Consultants, CA
1981	Park City - Silver Mountain Funicular plan, Park City, UT
1975-78	Bear Lake West, ski area master plan, engineering, Fish Haven, ID
1977	Wasatch Mountain State Park, Midway ski area project, Salt Lake City, UT
1977	Ruby's, mountain planning, Elko Fair and Recreation Board, Elko, NV
1972-88	Seven Peaks (Heritage) Mountain Resort, planning/ engineering, Provo, UT
1975/76	Galena, master planning, Jim Luescher (Redfield Lease), Reno, NV
1974/75	Tent Mountain, master plan, engineering Land McCulloch, Elko, NV
1972/73	LaSal, Four Corners Regional Commission, Moab, UT
1972/73	Big Wood, ski hill study, Mr. Bob Kress, Sun Valley, ID

UPHILL FACILITY PROJECTS

1998/2007	Brighton Crest and Millicent lift, construction, as-built survey certificates
1971-01	Lift Surveys: for Garaventa-CTEC, Doppelmayr and Resorts
1997-99	Kicking Horse ski area planning, lift surveys, Pheidias, B.C., Canada
1996	Crystal Mountain Aerial Tramway, Crystal Mountain, WA
1995-96	Our Lady of the Rockies, aerial tramway, Butte, MT
1994/95	Morning Star Tow, Hank Rothwell, Park City, Utah
1990	Maui Tramway Reconnaissance Study, Boyne USA Inc.,
1972-88	Seven Peaks Funicular (Heritage Mountain), Provo, Utah
1988	Silver Mountain Gondola, City of Kellogg, Idaho
1987	Santa Cruz Metro. Transit District; Tom McGean, Washington D.C.
1986	Grizzly Gulch Transportation Co., Salt Lake City, Utah
1985/99	Mount Ogden Tramway, local developers, Ogden, Utah
1984	Ruby Gondola, Grant Gerber/Ken Jones, Lamoille, Nevada
1981	Arrowhead Funicular at Vail, CO, for Voest Alpine, New York
1981	Vasquez at Winterpark Funiculars, CO, for Voest Alpine, New York
1981	Silver Mountain Funicular, J.J. Johnson & Associates, Park City, Utah

LIFT CONSTRUCTION

PROJECT ENGINEERS (Utah State Certification)

Brighton:	CREST EXPRESS, manufactured by Doppelmayr
Snowbasin:	BECKER and PORCUPINE, manufactured by Staedeli Lift Co.
Snowbird:	GAD-1, LITTLE CLOUD, MID-GAD

LIFT SURVEY (As Built Utah State Certification, where applicable)

Rail Roads:	2 Layout Alta RR, Brighton Tunnel and The Colony at White Pine Canyon
Funiculars:	1 Seven Peaks Resort (Heritage Mountain), UT
Jig-Backs:	2 Big Sky-Lone Peak, and Butte, MT



40th-year Qualifications

Gondolas:	6 Seven Peaks Resort, UT; Galena, NV; Crystal, UT, (2 sections)
Jig-backs:	2 Big Sky-Lone Pk. options, MT, 2 Snowbasin, E and W, UT 1 Crystal Mt. WA 1 Our Lady of the Rockies, Butte, MT
Chair Lifts:	4 Big Sky/ Yellowstone Club MT 2 Soldier Mountain 6 Brighton-Snake Creek, UT 7 Snowbird, UT 8 Heritage Mountain, UT 6 Snowbasin, UT 5 Galena, NV 5 Solitude, UT 2 Park City, UT 2 Moonlight Basin, MT 2 Crystal Mountain, WA 2 The Canyons, UT 2 Pebble Creek, ID 1 ea. Nordic Valley, UT; Snow King, WY 1 Pomerelle, ID Lassen, CA; and Crystal Mtn., UT
Handle Tows:	8 Conveyors: 12

SNOW AVALANCHE RELATED ASSIGNMENTS

2007	AltaBird Approach, Josh Linker, Salt Lake City, Utah (w/Schaerer)
2006-08	Wendy+Todd Mitchell, Davis Horn, Inc. Aspen, CO (w/Schaerer)
2006	Lot 1, Little Cloud Subdivision, Deposition, Aspen, CO
2005	Avalanche-free Highway Rerouting Design, U-210, Alta, UT
2003-06	Lot 20, City of Aspen, Lyle Reeder, Aspen, CO (w/Lev and Schaerer)
2001-07	Seven Sites in Pitkin County, Davis Horne, Aspen, CO (w/Lev)
2003-06	Little Cloud Subdivision, Tomas E. Lewis, Aspen, CO (w/Lev and Schaerer)
1992-95	Avalanche Evaluation of Highland Bowl, Aspen Highlands, CO (w/Lev)
2007-09	AltaBird Approach Subdivision, Sandy, Utah, layout, design, permitting
200-09.	Northstar Subdivision, road upgrading master plan, Park City, Utah,
2008-09	Bob Bonar, civil and site plans, Snowbird, Utah
2005-07	Snowbird Townhouses, civil and site plans, Snowbird, Utah
2005	Granite Builders, LLC, Sundown 23 Townhouses, Powder Mountain, Utah
2003	Several Mountain Residential site grading and road plans, Utah
1984	Pine Inn Associates (inclined elevator), Deer Valley, Utah

GRAVITY PARK LAYOUT AND DESIGN

2016...	<i>Sports Academy, Shanxi Taihang Shan, aerial focus, Ttiss, China</i>
2009	Wolf Mountain Resort, Utah, Mountain Coaster survey
2006-09	Liberty University, 5000-acre mountain recreation plan, Lynchburg, VA
2007	Mountain Coaster, survey and technical assistance, Wolf Mountain, Utah
2007	Snowflex, Alpine Slide site location, Liberty University, Lynchburg VA
1999-2007	Thrill Sleds Trail layout: Mountain Creek, NJ, Big Mountain, MT, Northstar, NV
2004/5	Alpine Slide, preliminary layout, survey, Snowbird, Utah
1986	Boreal CA, Alpine Slide layout and design assistance
1998	Bike Trail project, Bonneville RC&D Council, Salt Lake City, UT
1977-82/2000	Park City Alpine Slide layout and design, John Price and Powdr Corp.
1992	Breckenridge, CO, Alpine Slide dual track re-design
1976	Parks Planning: Northampton County Park Board, Evanston, PA

OTHER

1997...	<i>Bryce Canyon N.P, Bryce Canyon History Association,</i>
1996...	<i>Wasatch Touring and Uinta Backcountry Map Series, in-house project</i>
2006-13	Residential building /road planning /permitting Mürren, Switzerland
2009/10	Wasatch Canyons Master Plan, Technical Advisory, Envision Utah
2005-07	Legal Counsel to ski areas regarding skier accidents
2006	Deposition, Bryn Asselstine vs. Boyne USA, Inc.



40th-year Qualifications

1981-04	Ski Area Statistic of Utah, Utah Ski Association, Salt Lake City, UT
2000	Bonneville Shoreline Trail Committee, alignment option report
1986-98	Sorel Boot "EXO" new skiing device; Kaufman Footwear, Ontario
1995	CRCA, Centennial Parks Project, Salt Lake City
1986	Allen Avalanche Reconnaissance, Transamerica Insurance Co.
1984-87	Digital Terrain Modeling; Farwell, SE and Group Delta
1976, 79	Legal Council: sliding and collision of fallen skiers

References

CHECK: EXPERIENCE, CREATIVITY, INTEGRITY

rdoyle@brighonresort.com

Randy Doyle, G.M.
Brighton Resort
8301 Brighton Loop Road
Brighton, UT 84121-09740
+1 801-891-2000

leebo1994@hotmail.com

Lee Beaumont, Senior V.P.
Office of General Council
LIBERTY UNIVERSITY
Lynchburg, VA 24502-2269
+1 434-592-3315

pdiener@dgaparis.com

Pierre Diener, Urbanist
DGA Architects
11 Bis Avenue Carnot
F-75017 Paris
France
+33 145-74-3233

fuchsconte@aol.com

Iwan Fuchs, Ski Industry Consultant
Columnist, Winter Sports Technology
International (WSTI)
6 Maple Road
Laughlin Town
PA 15655
+1 412-817-1541

