

# exoSphere 3D

A professional data visualization service offered by K3 Resources, Inc.

## Curriculum Vitae -and- Statement of Fees Dec 2011

# Curriculum Vitae, Dec 2011

## Mr. Kas R. Osterbuhr

### Education

- B.S. Metallurgy and Materials Engineering, Colorado School of Mines, Golden, Colorado; May 1996, *High Scholastic Honors*, recipient of Metallurgical Engineering Faculty Award; Conducted University-sponsored research during summer terms 1994 and 1995
- *Enrolled*: M.S. in Geographic Information Science, University of Denver [Graduation ~2012]

### Work History

#### **2008 – Current, VP Engineering at K3-Resources, Inc., Garden City, Kansas**

K3 Resources is an Oil and Gas operator in the state of Kansas and also has a strong interest in resource exploration in a number of areas across the USA. I am responsible for integrating technology operations for the company with focus on visualization of data. Through K3, I offer my consulting work as an aviation expert in data visualization and reconstruction with particular emphasis on development of two and three dimensional maps and graphic animations. The core tools I utilize for all of my work are: data collection, reduction and analysis; geospatial mapping, temporal-spatial animation, graphic design and software programming.

#### **2003 – 2008, Aviation consultant at Orloff Consulting, Groveland, California**

Working for Orloff Consulting, I analyzed and reconstructed the events leading to aviation related accidents. This work involved both rotorcraft and fixed wing aircraft and encompassed: flight path reconstruction, calculation of aircraft performance, preparation of two and three dimensional animations, reviewing relevant Federal Aviation Regulations, wreckage inspection and aircraft systems analysis.

#### **2001 – 2003, Project leader at AirCrafters LLC, Watsonville, California**

AirCrafters LLC is a builder-assistance facility for individuals who are assembling, maintaining or upgrading experimental category aircraft. I was responsible for planning and executing the construction, flight test and maintenance of these aircraft ranging from ultralights to the high performance pressurised Lancair IV-P. Other work included maintenance of certified aircraft, annual inspections, minor airframe alterations and avionics installation.

#### **1996 – 2001, CAD/CAE/CAM Specialist at Sherpa Unlimited, Garden City, Kansas**

Sherpa Unlimited designed and manufactured products for customers in industries including medical, aerospace and research. We used technologies such as high speed machining, welding, sheet

metal fabrication, computer aided engineering and statistical process control. I developed and implemented a quality system in compliance with the Boeing D1-9000 standard. I handled the construction, flight test (including first flight) and maintenance of a Rans S-12 two-place experimental aircraft and logged over 400 hours as pilot in command.

## **Aviation Experience Overview**

I have accumulated over 1,000 hours of flight time. I hold a CFI in airplane single and multi-engine land, a private pilot glider and an advanced ground instructor certificate. I have acted as a flight instructor, test pilot and maintenance test pilot and I enjoy flying recreationally. I also hold Airframe and Powerplant mechanic ratings. Some of the aircraft I have flown are: Cessna 150, 172, 182; Piper PA-23, PA-28, PA-28R, PA-30, PA-34, PA-44; Beech BE-35, BE-95; Bellanca 8KCAB; Rans S-12; Glastar GS-1; Cirrus SR-22.

I have experience in the construction and repair of sheetmetal and composite aircraft (both carbon and glass fiber systems). I have installed a variety of avionics systems including GPS navigation, VHF navigation and communication, TCAD (TCAS), radar altimeters, autopilots and engine monitoring equipment. I have experience in powerplant installation and integration, dynamic propeller balancing, magneto ignition system adjustment, electronic ignition systems, engine fuel flow setup on turbo-charged engines, routine maintenance and inspection.

## **Other Activities**

I have been an instructor for the EAA SportAir weekend workshops since 2005. These classes are hosted at various sites around the country with my focus on teaching electrical circuit theory, aircraft system design and avionics installation. I have presented flight training materials in a number of venues as the primary speaker and have also presented on the topic of geospatial information systems at local events and regional conferences. I have been a volunteer for the FAA Safety Team program since 2010. My role for FAAST can include: Airmen counseling, identifying safety issues, assisting with local events or conducting WINGS training programs.

## **Publications and Testimony**

Simeone v. Bombardier-Rotax GMBH, Pennsylvania case No. 02-4852

[D] Fact witness testimony, October 19, 2005, Philadelphia, PA

Morgan (McDonald) v. Teledyne Continental Motors, Georgia case 10-A-08603-6

[P] Expert deposition, September 9, 2011, Atlanta, GA

[P] Trial testimony, October 4, 2011, Lawrenceville, GA

-end of list-

## Statement of Fees and Obligations

K3 Resources, Inc. is a Kansas based corporation. All invoicing, payments and financial transactions will take place through our main office. Clients are invoiced monthly with payments due within 60 days of invoicing. Finance fees of 1.5% per month will be assessed to overdue invoices.

A letter of retention is required on all legal matters and, for all new clients, a \$1,500 retainer fee is required. This will be credited against hours worked on the case. When billing to the client exceeds the amount of the retainer on deposit, normal monthly invoicing will commence.

Work is billed in quarter-hour increments at the rate of \$200 per hour. Deposition or courtroom testimony is billed at the rate of \$250 per hour. Where travel time is incurred, that time is billed at \$80 per hour unless work is being done. During productive travel time, the normal billing rate of \$200 per hour applies. Travel expenses such as hotel, rental car, airfare and meals during travel will be invoiced to the client without markup. Extended ground travel on company or personal vehicles will be invoiced to the client at 50 cents per mile. Airfare will be arranged with the client's cooperation on a case-by-case basis. When circumstances allow for work to be conducted on the airplane, first-class travel can be a productivity benefit. The client will be responsible for fees incurred due to cancellation or change of any travel itinerary.

Express shipments via FedEx or UPS (or similar) will either be billed on the monthly invoice without markup or paid directly by the client. Projects requiring large monetary expenditures for testing or other activities will be coordinated with the client beforehand and may require payment in advance of the work being conducted. K3 Resources does NOT bill clients for incidentals such as: optical media, office supplies, long distance phone charges, FTP file hosting, or any type of general office work associated with maintenance of the file.

In absolutely no situation will the billing, reimbursement or financial obligations of the client be adjusted based on either the outcome of the case or the results of any work product generated by K3 Resources, Inc.

## Correspondence and Points of Contact

All payments, legal correspondence such as retainer letters, questions regarding invoicing and business related matters should be sent to our Kansas office at the address below. Please note that the physical address is for UPS and FedEx shipments only; **postal mail is NOT received at the physical address.**

### ***Business transactions, contracts, invoicing, etc:***

K3 Resources, Inc.  
3064 Jones Avenue (FedEx/UPS only)  
PO Box 1152 (USPS postal mail only)  
Garden City, KS 68746  
620.275.7888  
(fax) 620.275.7888

To expedite the exchange of materials to be reviewed, please begin by contacting Mr. Osterbuhr as shown below. Materials sent to the Kansas office intended for case review may experience a slight delay. In many cases, we can facilitate nearly instantaneous file transfer through our computer data center.

### **Materials for case review:**

Kas Osterbuhr  
3200 Azalea Drive Unit L-1  
Fort Collins CO 80526  
Office 970.682.2445  
Cell 620.640.2580  
kas@exosphere3d.com (I respond to ALL emails, please call if you do not receive a timely reply)



EST	(sec since midnight)	lbo>>>>	H2>>>>	EST	(sec since midnight)	lbo>>>>	H2>>>>	EST	(sec since midnight)	lbo>>>>	H2>>>>	EST	(sec since midnight)	lbo>>>>	H2>>>>
AC TN Char 1	()	1	0.015625	AC TN Char 1	()	1	0.015625	AC TN Char 1	()	1	0.015625	AC TN Char 1	()	1	0.015625
AC TN Char 2	()	2	0.015625	AC TN Char 2	()	2	0.015625	AC TN Char 2	()	2	0.015625	AC TN Char 2	()	2	0.015625
AC TN Char 3	()	3	0.015625	AC TN Char 3	()	3	0.015625	AC TN Char 3	()	3	0.015625	AC TN Char 3	()	3	0.015625
AC TN Char 4	()	4	0.015625	AC TN Char 4	()	4	0.015625	AC TN Char 4	()	4	0.015625	AC TN Char 4	()	4	0.015625
AC TN Char 5	()	5	0.015625	AC TN Char 5	()	5	0.015625	AC TN Char 5	()	5	0.015625	AC TN Char 5	()	5	0.015625
AC TN Char 6	()	6	0.015625	AC TN Char 6	()	6	0.015625	AC TN Char 6	()	6	0.015625	AC TN Char 6	()	6	0.015625
AC TN Char 7	()	7	0.015625	AC TN Char 7	()	7	0.015625	AC TN Char 7	()	7	0.015625	AC TN Char 7	()	7	0.015625
AC Type	()	8	0.015625	AC Type	()	8	0.015625	AC Type	()	8	0.015625	AC Type	()	8	0.015625
ACBus-1	()	9	0.25	ACBus-1	()	9	0.25	ACBus-1	()	9	0.25	ACBus-1	()	9	0.25
ACBus-2	()	10	0.25	ACBus-2	()	10	0.25	ACBus-2	()	10	0.25	ACBus-2	()	10	0.25
ACBus-Exs	()	11	0.25	ACBus-Exs	()	11	0.25	ACBus-Exs	()	11	0.25	ACBus-Exs	()	11	0.25
Accel Lat	(g)	12	4	Accel Lat	(g)	12	4	Accel Lat	(g)	12	4	Accel Lat	(g)	12	4
Accel Long	(g)	13	4	Accel Long	(g)	13	4	Accel Long	(g)	13	4	Accel Long	(g)	13	4
Accel Vert	(g)	14	8	Accel Vert	(g)	14	8	Accel Vert	(g)	14	8	Accel Vert	(g)	14	8
Aileron-L	(deg)	15	4	Aileron-L	(deg)	15	4	Aileron-L	(deg)	15	4	Aileron-L	(deg)	15	4
Aileron-L Blue	()	16	0.25	Aileron-L Blue	()	16	0.25	Aileron-L Blue	()	16	0.25	Aileron-L Blue	()	16	0.25
Aileron-L Green	()	17	0.25	Aileron-L Green	()	17	0.25	Aileron-L Green	()	17	0.25	Aileron-L Green	()	17	0.25
Aileron-R	(deg)	18	4	Aileron-R	(deg)	18	4	Aileron-R	(deg)	18	4	Aileron-R	(deg)	18	4
Aileron-R Blue	()	19	0.25	Aileron-R Blue	()	19	0.25	Aileron-R Blue	()	19	0.25	Aileron-R Blue	()	19	0.25
Aileron-R Green	()	20	0.25	Aileron-R Green	()	20	0.25	Aileron-R Green	()	20	0.25	Aileron-R Green	()	20	0.25
Airspeed Ind	(kts)	21	1	Airspeed Ind	(kts)	21	1	Airspeed Ind	(kts)	21	1	Airspeed Ind	(kts)	21	1
Altitude Press	(ft)	22	1	Altitude Press	(ft)	22	1	Altitude Press	(ft)	22	1	Altitude Press	(ft)	22	1
Altitude Radio 1	(ft)	23	0.5	Altitude Radio 1	(ft)	23	0.5	Altitude Radio 1	(ft)	23	0.5	Altitude Radio 1	(ft)	23	0.5
Altitude Radio 2	(ft)	24	0.5	Altitude Radio 2	(ft)	24	0.5	Altitude Radio 2	(ft)	24	0.5	Altitude Radio 2	(ft)	24	0.5
Anti-Ice PB Eng1	()	25	0.5	Anti-Ice PB Eng1	()	25	0.5	Anti-Ice PB Eng1	()	25	0.5	Anti-Ice PB Eng1	()	25	0.5
Anti-Ice PB Eng2	()	26	0.5	Anti-Ice PB Eng2	()	26	0.5	Anti-Ice PB Eng2	()	26	0.5	Anti-Ice PB Eng2	()	26	0.5
Anti-Ice Valve Eng1	()	27	0.5	Anti-Ice Valve Eng1	()	27	0.5	Anti-Ice Valve Eng1	()	27	0.5	Anti-Ice Valve Eng1	()	27	0.5
Anti-Ice Valve Eng2	()	28	0.5	Anti-Ice Valve Eng2	()	28	0.5	Anti-Ice Valve Eng2	()	28	0.5	Anti-Ice Valve Eng2	()	28	0.5
Anti-Ice Wng L	()	29	0.5	Anti-Ice Wng L	()	29	0.5	Anti-Ice Wng L	()	29	0.5	Anti-Ice Wng L	()	29	0.5
Anti-Ice Wng R	()	30	0.5	Anti-Ice Wng R	()	30	0.5	Anti-Ice Wng R	()	30	0.5	Anti-Ice Wng R	()	30	0.5
Anti-Ice Wng PB	()	31	0.5	Anti-Ice Wng PB	()	31	0.5	Anti-Ice Wng PB	()	31	0.5	Anti-Ice Wng PB	()	31	0.5
AOA-L	(deg)	32	1	AOA-L	(deg)	32	1	AOA-L	(deg)	32	1	AOA-L	(deg)	32	1
AOA-R	(deg)	33	1	AOA-R	(deg)	33	1	AOA-R	(deg)	33	1	AOA-R	(deg)	33	1
AP DR Warning	(s)	34	1	AP DR Warning	(s)	34	1	AP DR Warning	(s)	34	1	AP DR Warning	(s)	34	1
AP-1 Status	(s)	35	0.015625	AP-1 Status	(s)	35	0.015625	AP-1 Status	(s)	35	0.015625	AP-1 Status	(s)	35	0.015625
AP-2 Status	(s)	36	0.015625	AP-2 Status	(s)	36	0.015625	AP-2 Status	(s)	36	0.015625	AP-2 Status	(s)	36	0.015625
AP-3 Status	(s)	37	0.015625	AP-3 Status	(s)	37	0.015625	AP-3 Status	(s)	37	0.015625	AP-3 Status	(s)	37	0.015625