

SASHA BERGHAUSEN

ARCHITECT

Professional Credentials

Registered Architect (License #11369)
North Carolina Board of Architecture

Architect Member
American Institute of Architects (AIA)

LEED AP
U.S. Green Building Council

Professional Experience

- 2010 - Present BLOK Architecture, PLLC
Principal and Founder
Durham, North Carolina
- 2001 - 2009 Ellen Cassilly Architect (ECA), Inc.
Project Architect
Durham, North Carolina
- 2000 Moore/Andersson Architects (now Andersson-Wise Architects)
Intern Architect (Summer)
Austin, Texas
- 1999 1853 Texas Governor's Mansion HABS Drawings
University of Texas – Austin (Summer School)
Austin, Texas
- 1998 - 1997 VOA Associates
Intern Architect
Chicago, Illinois
- 1997 Wheeler Kearns Architects
Intern Architect
Chicago, Illinois

Education

- 2001 University of Texas at Austin
M.Arch. (2nd-year transfer student)
Specialization in Historic Preservation
Austin, Texas
- 1997 University of Illinois at Chicago
1st year of graduate study
Chicago, Illinois
- 1995 North Carolina State University
M.S., Aerospace Engineering
Minor in Mathematics
Research Assistant (Dept. of Mech. and Aero. Eng.)
Teaching Assistant (Dept. of Physics)
Raleigh, NC
- 1992 Duke University, *Cum Laude*
A.B. History
A.B. Physics
Durham, NC

Honors

- 2014 Golden Leaf Award, ADF Building
The Durham Appearance Commission
Architect, BLOK
- 2010 Local Historic Landmark designation, Paschall-Thomas House
City of Durham
Architect, Homeowner, General Contractor
- 2008 Neighborhood Conservation Award, Kress Building
Historic Preservation Society of Durham
Project Designer, Ellen Cassilly Architect, Inc.
- 2005 Neighborhood Conservation Award, Dr. C.T. Norris House
Historic Preservation Society of Durham
Project Designer, Ellen Cassilly Architect, Inc.
- 2005 Pyne Historic Preservation Award, E.R. Thomas House (renamed Paschall-Thomas House)
Historic Preservation Society of Durham
Intern Architect, Homeowner, General Contractor
- 2004 Merit Award, Garden Study
Golden Leaf Awards for Community Appearance
Durham City-County Appearance Commission
Project Designer, Ellen Cassilly Architect, Inc.
- 2004 Honorable Mention, Poland/DeFeo House
AIA Triangle Isosceles Award in Preservation
Project Designer, Ellen Cassilly Architect, Inc.
- 2003 Pyne Historic Preservation Award, Poland/DeFeo House
Historic Preservation Society of Durham
Project Designer, Ellen Cassilly Architect, Inc.
- 2001 Phi Kappa Phi Honor Society
The University of Texas at Austin
- 2000 San Antonio Conservation Society Foundation Scholarship
The University of Texas at Austin
- 1999 Charles E. Peterson Prize, Forth Place
The University of Texas at Austin
National HABS drawing competition
- 1996 University Fellowship
The University of Illinois at Chicago
- 1992 Golden Key Honor Society
Dean's List (1989-1991)
Varsity Letterman, Men's NCAA Division I Track and Field (1989)
Duke University

Professional / Community

- 2016 - President of the Board (2014-15) / Board Member
2012 Duke University Faculty Club
- 2012 - Tour Committee
2011 AIA Triangle Residential Architecture Tour 2012

2012 -	Mentor
2010	AIA Triangle Young Architect's Forum (YAF)
2003-	Vice President
2002	Trinity Park Neighborhood Association

Select BLOK Projects

Custom Home, Architect, On-going

A local architect and his wife desire a nearby “country” retreat to compliment their in-town urban condo. Busy travel schedules and a specialty in large institutional commissions throughout the country—not residential design—prompted the client to propose a collaboration with BLOK to deliver a contemporary, high-performance home on a small lake in northern Durham.

Chapel Hill Renovation, Architect, On-going

A young family relocating to Chapel Hill from Florida found BLOK via the Houzz residential design website. BLOK originally worked to evaluate kitchen redesigns for a home purchase that fell through, but when a new contract was signed months later the couple returned to BLOK for help with a more extensive, 4400-square-foot make-over of a house along Chapel Hill Country Club's golf course.

120 W. Parrish Street Reconstruction, Architect, 2015

The client of 721 Broad Street returned to BLOK for an exciting downtown project. The purchase of 118 W. Parrish Street, adjacent to Mechanics and Farmers Bank, included a land-locked building immediately behind it and accessible only from an alley. Although vacant since it was gutted by fire in 2007, BLOK revived the building by constructing a new two-story office within the existing masonry walls. BLOK successfully utilized both the NC Rehab Code and the 2012 NC Building Code to navigate onerous requirements for the small lot with hardly any fire separation, and all work was approved by the Historic Preservation Commission through a Certificate of Appropriateness.

Hope Valley Renovation, Architect, 2015

BLOK's reputation for an inclusive process and thoughtful design won this large renovation at the recommendation of the GC, who was already selected by the homeowners prior to BLOK's involvement. The new addition nearly doubled the size of the existing ranch and delivered a contemporary interior with an exterior that compliments the existing house and creates several adjoining decks and porches.

G2B Gastropub Renovation Architect, 2014

BLOK was selected to alter the skillful design originally executed by Vernacular Studio (now Gensler) by adding a nano-brewery behind the bar. BLOK worked quickly to deliver an aesthetic sympathetic to the original that permitted the new construction to occur while the restaurant was closed over the July 4th holiday.

Trinity Park Renovation, Architect, 2014

An historic Cape Cod style house on beautiful Monmouth Avenue in Durham's historic Trinity Park neighborhood was in need of updating. BLOK collaborated with a Raleigh kitchen designer to remake the kitchen and created a mudroom break-out area off the existing rear hall. A new powder room and dedicated master bath replaced a single first-floor bathroom. All work was approved for a tax credit by the State Historic Preservation Office (SHPO).

West Club Blvd. Renovation, Architect, 2014

BLOK was hired by a pediatrician and librarian to renovate the rear portion of their historic four-square, nearly across the street from BLOK's award-winning Paschall-Thomas House. A generous screened porch and deck were added, and BLOK helped to coordinate application for a tax credit from the SHPO. BLOK also encouraged the owners to retroactively apply for a tax credit for their work on the main house several years prior, which was granted.

Durham DBT, Architect, 2014

After helping a psychologist evaluate several office condominiums for purchase, BLOK designed the office up-fit for the space that was ultimately purchased in the Southpark office complex. In order to help the psychologist avoid a costly lease renewal, BLOK worked quickly to expedite project delivery, including brokering a negotiated fee for a construction contract as opposed to suffering the delays of a bid process.

BLOK Studio, Architect, 2013

An unexpected vacancy at 721 Broad Street (shell by BLOK) enticed BLOK to move from a rented desk in downtown Durham to a dedicated office. High ceilings with exposed mechanicals and a north-facing window onto an urban courtyard provided a perfect canvas for BLOK. The new office, as well as the entire building, offers studio visitors tangible evidence of BLOK's work.

A Go•Go Salon, Architect, 2013

The final retail space within the 721 Broad Street shell has a window, but no street frontage, and is perfectly suited to a new salon owned by stylists with an established reputation and clientele. They asked BLOK to create a cohesive space that still provides breakout areas for shampoo and color processing while conveying a sense of natural, healthy hair care.

Kress Condo Renovation, Architect, 2013

5 years after being the lead designer for 10 luxury condos within the Kress Building downtown, Sasha was called back to renovate the upstairs of one of the two-storey units. Increasing the floor area of the existing bedroom required encroaching into the stair opening, which made headroom tight. By using structural steel concealed within a tiered soffit, BLOK added floor space while preserving a gracious stair.

American Dance Festival's (ADF) Samuel H. Scripps Studios, Architect, 2012

As the Director of ADF witnessed construction at 721 Broad Street from her administrative offices just down the block, she became excited about the shape and potential of the burgeoning renovation. The high ceiling, long spans, public presence, and proximity to Duke's East Campus made the upper floor ideal for dance studios, the first ADF has owned in Durham since moving here decades ago. BLOK was the Architect of Record for the studio up-fits and collaborated with ADF's long-time design consultant to give ADF a home.

STeP Shoe Boutique, Architect, 2012

One of the several first-floor retail spaces within 721 Broad Street (shell by BLOK) occupies nearly 100% of the generous glass façade facing a Durham thoroughfare. The owner of Smitten Boutique downtown decided to open a women's shoe boutique within and hired BLOK to provide a contemporary, yet homey, store. Steel pylons, up-lit from below, span the front and provide a playful way to display shoes that are balanced precariously.

Hillsborough House Addition, Architect, 2012

Clients with an isolated house nestled on a wooded 12-acre plot in Hillsborough wanted a new kitchen and some expanded living spaces, but mostly wanted to rediscover a passion for their home. After seeing 721 Broad Street take shape, they hired BLOK to transform their house with similarly bold lines, which include volumes that slide past one another and a butterfly roof.

Central Park School for Children (CPSC) Feasibility Study, Architect (pro bono), 2012

With two children attending CPSC and a good relationship with a building owner of adjacent property, Sasha brought the school administrators and members of the Board together with the building owner to investigate expansion of the elementary school into a middle school. Ultimately the school's annual budget was insufficient to finance the up-fit and lease the building, but BLOK's pro bono work allowed the school to reach this conclusion through a free feasibility study.

Latino Credit Union, Architect, 2012

Since a permit is required for nearly all commercial work (if it costs greater than \$500), and an architect must seal the drawings for commercial construction, sometimes BLOK is called upon for something as simple as reconfiguring an office floor. Such was the case at the Latino Credit Union, but BLOK made the process painless by working quickly, efficiently, and cheaply to deliver permit drawings.

721 Broad Street (ADF Building), Architect, 2012

An existing 1964 commercial masonry building, originally an insurance company, was one of several nondescript buildings bordering Duke's East Campus. The owner holds multiple properties throughout Durham but was eager to make 721 a signature property given its prominent location. BLOK delivered by retaining all the original walls and adding a second story clad in metal panels and an outward-leaning glass façade over 25-feet tall. The building was quickly leased entirely for rates nearly double downtown properties and also became the new home for American Dance Festival in Durham.

Forest Hills Tudor Renovation, Architect, 2012

A beautiful 1930's-era Tudor (a contributing structure in the Forest Hills National Register Historic District) still possessed the kitchen resulting from a 1940's renovation. BLOK designed a completely new kitchen with custom cabinetry and a modest bump out into the rear yard. A previously enclosed side porch was converted into a guest suite and mudroom, and an office space was carved out of the L-shaped family room.

Mexican Vacation Home, Architect, 2011

A Durham couple purchased a mid-nineteenth-century adobe house in Guanajuato, Mexico, in need of a major renovation. BLOK established a direction for the design and construction by completing Schematic Design and Design Development for a compact structure: each floor, accessed by a narrow spiral stair, only accommodated one room. At the conclusion of DD, a Mexican architect completed the construction documents and oversaw the construction.

Chapel Hill Toffee, Architect, 2011

Although carving a 3,000 SF rectangular manufacturing space out of an existing 20,000 SF warehouse was not a design challenge, it was challenging to usher the drawings through code review on a very compressed time schedule.

Kappa Kappa Gamma Feasibility Study, Architect, 2011

BLOK consulted with a steering committee for a UNC sorority about how to fit more beds and study carrels into their existing house.

Historic Carport, Architect, 2011

The demolition of an historic carport listed as a "contributing structure" to the WHHNA Historic District had the potential to be a challenge. Through clever navigation of city requirements BLOK was able to demolish the dilapidated structure quickly (avoiding a one-year stay) and re-build on the old footprint right on the property line (instead of obeying the usual 9-foot setback).

Attic Master Suite, Architect, 2011

An existing stair accessed an attic with a steeply pitched roof over an L-shaped floor plan. Squeezing a master bathroom and bedroom into the attic to make use of the existing windows, while still meeting code-required minimum head heights was a challenge.

Attic Build-out Feasibility Study, Architect, 2011

An existing home has a remarkably large attic, but no access stair. With a maxed-out floor plan and high ceiling heights, finding room for a new stair was a challenge.

Triangle Brewing Company Feasibility Study, Architect, 2010

A local Durham brewery wanted to investigate code and financial hurdles in the creation of a tasting room and an event space as part of the warehouse brewery operations.

Trinity Park Feasibility Study, Architect, 2010

When a family considered expanding their house, they looked to a contractor with whom they had completed two previous projects. His working relationship with BLOK led to collaboration to design and price a rearward expansion, which was complicated by limits on new construction because the existing house violated the side setback. Plan drawings and SketchUp models helped identify the best solution.

Academy Center Up-fit, Architect, 2010

BLOK created a permit set of drawings for a chiropractic and wellness office in an existing office center. The design was a straightforward translation of a basic office layout desired by the owner, but the challenge was creating a comprehensive document very quickly to aid the contractor ASAP.

Attic Office, Architect, 2010

A house in Carrboro already had an unfinished walk-up stair to the attic roughed in. By cutting new roof windows into the attic, BLOK created a pleasant home office with both great day lighting and privacy.

Hope Valley Farms Addition, Architect, 2010

By adding a second floor atop a 1.5-story great room, office and playroom space was created in a second floor addition that raised the roofline to match the main house. The existing roof trusses were re-used (simply raised) to save money and access was created via an internal bridge to maintain dramatic spaces within. A new front porch helped to make the street façade much more handsome.

Efland Detached Garage, Architect, 2010

The owner desired a very large garage and workshop almost as large as the house it served. BLOK worked through 3-D computer modeling to deliver a massing and siting that helped to mask the size of the garage compared to the house.

North Carolina Biotechnology Center, Architect, 2010

An outdated videoconference room required refreshing and a demonstration lab was converted into a server room. The on-site maintenance provider acted as the licensed GC and BLOK's proposal through a public bid was accepted over competitors because of a concerted effort to limit scope, drawings, and cost by using a design-build team comprised solely of subcontractors who already serviced (and were familiar) with the building systems.

Duke University Mill Village Construction Administration, *Architect*, 2010

The remains of an old mill village were buried within Duke's Central Campus in a prime location to serve students, but the original buildings were too unsafe to utilize. Four buildings were remade in a historical style to form a new enclave for students providing a general store, meeting rooms, police substation, and an exercise building amidst new decks, hardscape, and landscaping. Construction Administration conducted by BLOK following design work completed at ECA as a Project Architect.

Staff One Office Renovation Construction Administration, *Architect*, 2010

The owner of an event security company purchased two 1950's office buildings at the south end of Trinity Park. A recent, incompatible hipped roof addition and low ceilings resulting from an inelegant HVAC installation were remedied with new, opposing shed roofs that provide a pleasant, high space within and a distinctive appearance from the exterior. Construction Administration conducted by BLOK following design work completed at ECA as a Project Architect.

Trinity Park Addition (Construction Documents), *Architect*, 2010

A 1,600 SF, two-story house provided the owners the location they desire but not the space. A four-level addition (including basement and attic) takes advantage of the falling topography while integrating sympathetically with the original house and neighborhood to more than double the size of the original house. A garage in back provides a workshop and guest accommodations.

Duke University Faculty Commons, *Intern Architect*, 2008

The faculty dining room in Duke's West Union Building was in need of a facelift; faculty members who had visited Watts Grocery (designed by Sasha while at ECA) asked the Director of Dining Services why their facility couldn't provide a similarly inviting atmosphere? The design separated the buffet-style food service area more completely from the dining area and also provided a greater variety of seating arrangements to make small parties feel as welcome as larger groups.

E.R. Thomas House, *Intern Architect/Homeowner/General Contractor*, 2004 – 2005

The E.R. Thomas House (renamed the Paschall-Thomas House following historic research) was built in 1919 with material salvaged from Washington Duke's 1888 Fairview Mansion. During the renovation all historic materials were left intact and a modern kitchen and bathrooms were built within the existing envelope, but grouped in the rear. A screened porch was added and a freestanding garage with an automotive lift was built towards the back of the lot. All work was done in accord with the U.S. Secretary of Interior's Standards, received a NC historic renovation tax credit, and was recognized by the Historic Preservation Society of Durham with a Pyne Preservation Award in 2005. The home has also been awarded a local historic landmark designation by the City of Durham.

SELECT PROJECTS COMPLETED AT ECA**High Performance Driving Studio, Virginia International Raceway, *Project Architect*, 2009**

A driving instructor and avid racer wanted a unique training facility crafted within a pre-fabricated metal garage located trackside. The resulting installation is a finely crafted folly inserted inside the unremarkable building, offering a pleasantly playful and handsome car display area, raised conference room, and kitchenette/bath while still preserving garage space for automotive work.

Hyco Lake House, *Project Architect*, 2009

A modest house built of inexpensive materials occupies a pleasing promontory on Hyco Lake. The structure of the house was retained, but modestly reconfigured for a young family and totally re-clad with board-and-batten siding and upgraded roofing to appear much more charming than when it was clad in vinyl siding.

Erwin Apartments Feasibility Study, *Project Designer*, 2008

A beautiful 1930's apartment building in Trinity Park has been family-owned for decades and required major maintenance. In addition to soliciting a condition assessment of the 4-story, 29-unit building, the owners requested an investigation of altering the building to combine apartments to create luxury condominiums for lease or sale.

California Cabin, *Project Designer*, 2008

An old family apple orchard in northern California is dotted with outbuildings and cabins from different eras. The owners wanted to construct a small (850 SF) cabin utilizing reclaimed redwood beams to provide a second home for the husband, who spends weekdays working 3,000 miles away from his family in Durham.

Watts Grocery Restaurant, *Project Designer*, 2007

A chef and caterer wanted to transform a retail space carved from a 1960's drug store into a neighborhood eatery. The 3,000 SF space made a commercial kitchen, dining room, and generous bar a tight fit, but two years later the restaurant has succeeded in becoming the homey—yet contemporary—neighborhood hangout the owner initially envisioned.

Dr. C.T. Norris House Conservatory, *Project Designer, 2007*

A repeat client wanted to add a conservatory to an award-winning historic home in Trinity Park. The 500SF addition is sympathetic to the original house and sits amidst a handsome urban garden. It brings the outside in and provides the special place for yoga and entertaining that the owner imagined.

Forest Hills Renovation, *Project Designer, 2006*

A Durham chef and cookbook author purchased a solidly built 1950s house that she wanted to make more contemporary inside with an open plan and suitably professional kitchen. Yet, she wanted the outside to possess more of a cottage aesthetic, which was achieved through shake siding, color selection, and the muntin pattern of newly installed windows.

Kress Condominiums, *Project Designer, 2006*

A local developer tried to sell condominium shell space in a historic, downtown 5-and-dime without success because the build-out was difficult for prospective buyers to imagine. Nine luxury condominiums were finished out on-spec and almost all sold as soon as they were completed.

Heart Imaging Technologies Phase 2, *Project Designer, 2006*

Repeat clients returned to build out the additional, unfinished office suite of the two they purchased.

Duke Forest Addition, *Project Designer, 2006*

A modernist house presented a design challenge because it was a windowless box on the street side, yet charmingly open on the back. The original configuration was also not conducive to enlarging, but the solution preserved street-side privacy while integrating well with the existing floor plan, nearly doubling the size of the original house.

Southern Village Attic Build-out, *Project Designer, 2005*

A new “builder” house in an up-scale development provided an increasingly common challenge: a large attic space beneath a needlessly complex roof form. Despite the challenges presented by an illogical, dark space the design provided useable spaces with good light from dormer windows.

Forest Hills Basement Up-fit, *Project Designer, 2005*

This project resulted in an increase in conditioned space beneath the house, overcoming the typical hurdles of connecting to the outside and managing the existing plumbing and mechanical services for the upper floors.

Watts-Hillandale Screened Porch, *Project Designer, 2004*

Screen porch additions to the rear of historic homes result in wonderfully useful outdoor space in this temperate, yet buggy, climate. The design integrated well with the style of the house and preserved light in the rear rooms of the home.

Trinity Park Master Bathroom Renovation, *Project Designer, 2004*

An old bathroom in a historic home was combined with space from both a small room and a closet to deliver a gracious master closet and bath.

Heart Imaging Technologies, *Project Designer, 2005*

An office up-fit in one of two office condominiums purchased provided a secure server room with redundant cooling and an office layout with the ability to convert space to accommodate MRI and CT scanners in the future. Expansion into the second office suite was also taken into consideration to ensure a painless and inexpensive connection to a future up-fit.

Campus Hills Park Weight Room (City of Durham), *Project Designer, 2003 - 2008*

After a condition assessment of all buildings in the park was completed, Durham decided to add a freestanding weight room instead of renovating the existing recreation center. The 1400 SF building was constructed to manage solar heat gain, provide views of the surrounding toddler play area, and resist vandalism.

TTA Regional Rail System, *Rail Station Design Consultant, 2003*

The Triangle Transit Authority planned an \$847M light rail transit system between Durham and Raleigh, tabled because it failed to win federal funding due to insufficient ridership projections. Five architectural firms collaborated to create prototypical station designs and to coordinate the stations with the rail line engineers and rail corridor landscape architects. Ellen Cassilly Architect, Inc., coordinated the Ninth Street Station construction documents, designed the Ninth Street Parking Deck, devised the system-wide platform paving pattern, and designed the Duke Hospital Station, which was moved to phase two of the construction.

Fuqua School of Business, Project Designer, 2005

Fuqua commissioned the design and delivery of two mobile technology kiosks for deployment throughout the business school. The kiosks are double-sided so they may be placed in large atriums or hallways. Each kiosk required coordination with A/V consultants for the installation of LCD flat panels and data jacks to interface with student laptops, a metal smith who constructed the steel armatures, and a cabinet-maker who clad them in wood.

Ford Residence, Project Designer, 2004

After sale through Preservation North Carolina, this 1870s home was moved from Henderson, North Carolina, to northern Granville County. The original house was renovated and a sympathetic addition was designed that connected via a breezeway.

Duke University Residential Garage, Project Designer, 2003

The construction of the Nasher Museum of Art required removal of a small residential garage that served one of the original professor's houses along Campus Drive. Duke commissioned this garage to replace the demolished structure, and it was designed with a masonry base and dormer windows to complement the adjacent house.

Watts-Hillandale Garden Study, Project Designer, 2003

A Duke professor wanted a quiet retreat in the rear yard for writing. The resulting structure is just one small room that's flooded with northern light. A small bathroom allows it to double as guest space, and a potting shed in the rear helps the owner maintain the garden in which it is situated. This small building was recognized with a Golden Leaf Merit Award for its handsome, unassuming contribution to the neighborhood landscape.

Dr. C.T. Norris House, Project Designer, 2003

In addition to renovating all areas of this historic 1911 Trinity Park home, an inconspicuous pantry addition was added off the kitchen. Within a new kitchen with custom cabinets was designed and a bedroom was converted to a walk-in wardrobe lined with custom oak cabinetry. The resulting renovation was recognized by the Historic Preservation Society of Durham with a Neighborhood Conservation Award.

Capehart Duplex, Project Designer, 2002

The owner of a property in a transitional Durham neighborhood commissioned a tiny over/under duplex that was to be constructed as a rental. Even though this whimsical design provided the requested program and met the required construction budget of \$80/SF, unfortunately it remains un-built because the banks' loan standards would not finance such small studio apartments.

Poland/DeFeo Residence, Project Designer, 2001

This 1954 home is one of a handful designed by founding NCSU School of Design professor George Matsumoto. Expansion of Crabtree Valley Mall threatened this forgotten gem, so the owner purchased it and moved it 38 miles to the shores of Little River Reservoir. The upstairs was renovated and a completely new downstairs apartment was created. Not only was this house recognized with a Pyne Award, but it received the rare honor of being listed individually on the National Register of Historic Places despite its move.

SELECT PROJECTS COMPLETED AT MOORE/ANDERSSON ARCHITECTS

Martin Residence, Intern Architect, 2000

This 20,000 SF residence, made largely of site-cast concrete, required rigorous calculation of all the top-of-wall heights.

SELECT PROJECTS COMPLETED AT VOA ASSOCIATES

R.R. Donnelly Building Renovation, Intern Architect, 1998

A developer hired VOA to devise renovation plans for this 1M SF Industrial Gothic printing press that had been abandoned just south of the Loop in Chicago. Efforts to document the existing conditions of the enormous building were not rewarded with a constructed project once funding fell through.

SELECT PROJECTS COMPLETED AT WHEELER KEARNS ARCHITECTS

Luxury Apartment, Intern Architect, 1997

The owners purchased the entire 41st floor of a luxury apartment on the northern edge of downtown Chicago. Design work for the \$2.2M apartment by Wheeler Kearns required verification of the existing conditions as well as large-scale models of the new kitchen/office area.

Reports and Publications

National Register nomination for Seaholm Plant, a 1950-1955 Deco-style steam turbine power generating facility located in the central business district of Austin, Texas.

"Direct Simulation of Shock Front Radiation in Air," *AIAA Journal of Thermophysics and Heat Transfer*, Vol. 10, No. 3, July—September, 1996. Paper presented at AIAA Thermophysics Conference, San Diego, California, June 19-22, 1995.