FOR THE PAST 50 YEARS, Modern Steel Construction has chronicled the growth of the fabricated structural steel industry. Whether it was the first North American use of high-strength steel or the industry shift to A992, MSC illustrated the trends in steel design and construction through thousands of pages of project profiles, technical reports, and new product information.

The magazine's roots actually go back to 1930, when AISC launched Aminsteel News to keep members informed about the fledgling association's work. By 1938, it had morphed into The Steel Constructor, which included association news and technical updates. By 1944, it was supplanted by Steel Construction Digest, a newsletter with a reach extending for the first time beyond the association's membership.

Finally, in 1961, Modern Steel Construction was born.

For half a century, Modern Steel Construction has presented the latest information on both buildings and bridges. We covered the nation's first welded suspension bridge in 1964 and just last year we wrote about innovative folded plate girder systems. In the 1960s, we wrote about structural innovations such as composite construction and today we're covering such topics as self-centering frames and slit steel-plate shear walls. We wrote about the beginning use of spray-applied fire protection in 1970 and we're now covering shop-applied intumescent paints.

The following pages present a pictorial of 50 years of MSC. But if you want more, please visit www.modernsteel.com. We've posted every issue for your reading enjoyment (just click on the archives link in the upper right hand corner).
1994: Moment connections provided both long spans and structural stability on the Bullocks department store building in Burbank, Calif.

1994: For the first time, MSC printed the complete list of AISC Certified fabricators.

1995: Finally answering the question of why we put a Christmas tree atop a building during the topping out ceremony.

1956: For the first time, MSC notes that only four states require continuing education for renewal of P.E. licenses.

1994: MSC extensively covered the Northridge earthquake and the resultant seismic research.

1994: Larry Griffis’ T.R. Higgins lecture offered everything you need to know about composite frame construction, using the Bank of China in Hong Kong as one example.

1995: Post tensioned box girders were an aesthetic and cost-effective option on three Florida bridges.

1996: Five years before 9-11, owners and designers were already concerned with the potential for terrorism. New York City’s new 911 service center is designed to resist a terrorist attack.

1996: H. Louis Gurthet begins a 10-year tenure as president of AISC (yes, the same Lou Gurthet who now handles MSC ad sales!).

1996: The Reduced Beam Section (dogbone) is introduced.

1996: Seismic design is in the forefront of everyone’s mind. This issue featured new information on weld toughness and introduced MSC readers to the first of a series of proprietary seismic solutions: the MNH-SMRF Connection, now known as the SidePlate® connection.
1997: A lecture at the 1997 NSCC explained the concept of unrestrained and restrained fire ratings. As the speaker noted, almost all interior steel can be considered restrained in fire calculations.

1997: Combining Grades 70W, 50 and 36 on the Central Bridge between Newport, Ky., and Cincinnati allowed the designers to maintain a constant girder depth.

1997: The Niles West Field House in Skokie, Ill., minimized its internal volume (and therefore the space that needed to be heated and cooled) by moving the structural system outside the building.

1997: The Blue Water Bridge between Port Huron, Mich., and Sarnia, Ontario, is an early example of the use of LRFD in bridges (it was also designed with all SI units).

1997: Moveable roofs are all the rage for ballbarks. For the Bank One Ballpark in Phoenix, the two halves collapse in a similar fashion to a telescoping tube.


1998: MSC publishes an in-depth analysis of the cost-saving potential of A572 Grade 50 compared with A36.

1998: AISC introduces its Erector Certification program.

1998: The Cardington fire tests encourage designers to contemplate performance-based fire design as a practical alternative to prescriptive designs.

1999: The Steel Conference heads north to Toronto and is renamed the North American Steel Construction Conference.

1999: AISC pushes EDI to the forefront of steel design.

1999: It only took 26 months from the start of design to the completion of construction on the 1.5-million-sq.-ft Boeing Rocket Booster facility in Decatur, Ga.

1999: Damen Ave. arch creates a new neighborhood landmark in Chicago while also demonstrating the economy and speed of construction of steel.

1999: A992 is introduced.

1999: It only took 26 months from the start of design to the completion of construction on the 1.5-million-sq.-ft Boeing Rocket Booster facility in Decatur, Ga.
Designed to accommodate the physical education and athletic needs of a burgeoning student population, the 40,000-sq.-ft. Niles West High School Field House includes four teaching stations, a competitive 160-meter track and four full-size basketball courts, which allows several sporting events to take place simultaneously.

The design of the building was driven by programmatic and structural requirements. Perhaps the greatest challenge was to sat-modern steel construction. 2000: Design-Build is the buzzword for the year.

2000: Nucor-Yamato Steel adds a surcharge to A36; the move to A992 is complete.

2000: A new system using concrete plank atop a grid of asymmetric steel members is used on a new Drexel University dormitory building. The result is low-floor-to-floor heights and incredibly rapid construction. The system ultimately leads to the development of the increasingly popular Girder-Slab® System.

2000: Fire engineering saved $750,000 by reducing the need for passive fire protection of the exposed steel at the Mashantucket Pequot Museum in Ledyard, Conn.

2000: The steel-plate shear wall installed during the rehabilitation of the Oregon State Library in Salem was a precursor to a system that gained popularity later in the decade.


2001: Utilitarian doesn’t have to mean pedestrian, as this chiller plant in Philadelphia proves.
2001: AISC opens the Steel Solutions Center.

2002: Who says steel can’t be fun? Few visitors to Seuss Landing in Orlando are aware of the complex geometry for the steel frame supporting everyone’s favorite cat in a hat.

2002: After a pair of errant barges knocked down the I-40 bridge at Weber Falls in Oklahoma, the steel industry mobilized to get a new bridge up and open in just two months.

2002: Everyone, including Case Western Reserve University in Cleveland, wants their own Frank Gehry building.
Performance-Based Design for The standard fire resistance test

Fire resistance requirements in the US building codes are based on the presumed temperature profile and duration of a standard fire, as described in ASTM E119. The test determines load bearing capacity (the ability of a building element to continue its function for a period of time without collapse), integrity (the passage of flames or gases hot enough to ignite cotton waste) and insulation (assuring the temperature on the unheated side of the element does not exceed 250°F).

In the test, a beam, column, wall or floor under its calculated design load is exposed to a standard fire defined by a prescribed temperature/time curve. Programming the temperature of a test furnace through controlling the rate of fuel supply achieves the curve. The fire resistance of the element is taken as the time to the nearest minute, between commencement of heating and failure under one or all of the criteria outlined above (load bearing capacity, integrity or insulation). Periods of fire resistance are normally specified as half hour, one hour and/or two hours.

This test is based on methods first developed in the early 1900s when there was very little knowledge of how fires behave and their effect on structural performance (AISI 1981). The standard fire test has been widely criticized. The difference between the standard test temperature-time curve and temperature–time curves measured in real compartment fires is considerable (see graph).

The graph shows the temperature/time curve for the standard test compared to real fire temperatures from compartment fires with various window areas. The differences in duration and severity are apparent well as the curve. This figure shows that in many cases periods of fire resistance are over-specified.

2003: Steel framing dominates the early ranks of LEED-certified buildings, including one of the first Gold projects, the Department of Education Building in Sacramento.

2003: For the Dallas Children’s Medical Center, steel was the answer for adding six stories to the existing concrete structure.


2004: Houston’s Reliant Stadium sets a U.S. record for the size of an opening in a moveable roof stadium.

2004: An entire issue devoted to green construction includes a discussion of the designing for deconstruction as well as a look at a 454,000-sq.-ft green roof atop a Ford Motor Co. plant in Dearborn, Mich.

2004: Roger E. Ferch becomes AISC's new president.

2004: An entire issue devoted to green construction includes a discussion of the designing for deconstruction as well as a look at a 454,000-sq.-ft green roof atop a Ford Motor Co. plant in Dearborn, Mich.

2004: Houston's Reliant Stadium sets a U.S. record for the size of an opening in a moveable roof stadium.

2004: Santiago Calatrava's Sun Dial Bridge in Redding, Calif., works as both a sculpture and as a bridge.

2004: The US20 bridge over the Iowa River is the first in the U.S. to use the incremental launch method for erecting an I-girder bridge.

2005: The parking structure for the Legacy Salmon Creek Hospital in Vancouver, Wash., is an early example of the SmartBeam™ system in a parking structure.

2005: Buckling Restrained Braced Frames (BRBF) became very popular later in the decade. Shown is an early example at the Intermountain Medical Center in Murray, Utah.

2005: Building 1 at Santa Row in San Jose, Calif., was one of the first to use the proprietary ConXtech system.

2005: The parking structure for the Legacy Salmon Creek Hospital in Vancouver, Wash., is an early example of the SmartBeam™ system in a parking structure.
Should braced frames, shear walls, or moment-resisting frames be selected to resist lateral loads? Based on a preliminary column grid, estimated floor-to-floor height, and myriad other metrics, which structural system makes the most sense?

- Should braced frames, shear walls, or moment-resisting frames be selected?
- Which structural system augments the mechanical design—lighter crane picks, lower cost, faster time to market, and thus less interest paid in the interim?
- Building Council (USGBC) established the structural engineer is then typically asked to discuss the appropriateness and the pros and cons of various structural systems; and elements.

The design process kicked off with a two-day design charrette, where two stairs, three elevators, an elevator lobby, and restrooms. During the meeting, the structural engineer asked some unusual questions to test the team’s and owner’s commitment to cost-effective, efficient design. While structural design itself contributes very few possible points to a project’s LEED “point total,” it can result in increased points for other disciplines. Some of the questions were:

- How does the selection of a particular structural system affect a construction schedule or accelerate construction?
- How little structure is required to complete the structure?

The Gateway Bridges on I-94 near Detroit mark the first time tied arches are built with longitudinal ties buried under the road. The innovative system solves the redundancy issue with tied arches.

2007: The Main Street Bridge in Columbus, Ohio, is the first inclined single-rib arch bridge in the U.S.

In the case of the Banner Bank Building in Boise, the architect, begins to establish basic design of the program requirements, building size and orientation, and fundamental building systems. Cladding systems, shading elements, and windows were established. The structural engineer is not consulted. Only a preliminary column grid is used to discuss the appropriateness and the pros and cons of various structural systems; and elements.

The architect’s requirement of supporting the floor extension manager, structural steel was chosen. To keep the tonnage as low as possible, still more studies were carried out. With the new skyline, the structural system solves the redundancy issue with tied arches.

2006: The Main Street Bridge in Columbus, Ohio, is the first inclined single-rib arch bridge in the U.S.

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- How does the selection of a particular structural system affect a construction schedule or accelerate construction?
- How little structure is required to complete the structure?
2008: The Bank of America Tower in New York City features 15-ft cantilevers to create column-free executive offices.

2007: The Blennerhassett Bridge over the Ohio River between West Virginia and Ohio used 30 million lbs. of HPS for its 4,000-ft span.

2008: A steel framed, post-tensioned slab system proved economical for a parking structure at Ruby Memorial Hospital in Morgantown, W.Va.

2008: Southpark Hospital in Shreveport, La., remained fully operational while an additional floor was added.

2008: The Dallas Cowboys Stadium boasts the largest single-span roof structure in the world.
WHILE THE NEVER-ENDING RACE for world's tallest building has shifted to the Middle East for now, tallest on the continent is nothing to sneeze at. Upon its completion next year, Tower A of the Federation Tower complex in Moscow, Russia will be the tallest building in Europe at 1,181 ft (its architectural central spire will reach 1,470 ft).

The 93-story Tower A is mainly concrete (as is the 62-story Tower B), but major steel framing at multiple crucial areas of the tower—including an atrium at the top—was essential to bringing the tower together and allowing it to vie for the title of tallest in Europe. Roughly 5,500 tons of structural steel in all made this happen.

Tower A Structure

Outrigger levels—complicated structural interchanges involving column transfers, shifting of wind loads from core to exterior, and rebalancing of building weight—are the hubs of the tower's load network. These hubs are built in steel, and the result is open space for equipment, access to fresh outside air, and a system of trusses capable of supporting fully reversed loading.

The trusses link all of the exterior columns together into one giant perimeter “belt” and outrigger trusses link the concrete central core to this belt. This linkage manifests the network of load paths that is the cornerstone of the building’s plan to maximize the resiliency of the structure as a whole, stabilize it against lateral loading, and mitigate the potential for progressive collapse.

The steel truss systems are placed at the one-third and two-thirds heights of Tower A and share floor space with mechanical rooms and refuge areas. These areas naturally separate the building into distinct fire protection zones as well as occupancies. Steel framing also allowed clear space—that would have been impossible to match with concrete walls—facilitating the MEP design and the layout of refuge floors.

The complex geometry of the tower also made these particular areas more conducive to steel framing. The extraordinary amount of reinforcing steel that would be required and the curvature of the exterior belt made rebar detailing difficult and execution cumbersome, and thus prone to non-conformance. On the other hand, angle changes were easily handled by steel truss work, with gusset plates carefully detailed and shop-fabricated to bend around the column flanges to make the required curvature.

At about 20 ft deep, the 33rd-floor outrigger system is shallower than the designers would have preferred due to other design constraints, but even more reason to take advantage of the ability of steel to handle steel steps in to help Moscow’s Federation Tower reach new heights and become Europe’s tallest building.
Detroit’s New Mexicantown

Bagely Street Pedestrian Bridge is the first cable-stayed bridge in the state and part of Michigan’s $230 million I-75 Gateway Project. The two-span, cable-stayed structure crosses 10 ramps and roadways, including both I-75 and I-96, and provides a vital link between the east and west sides of Detroit’s Mexicantown community.

The total bridge length is 417 ft, with a main span of 276 ft and a back span of 141 ft. The forestays are arranged in a fan configuration and are inclined in both the longitudinal and transverse directions. The bridge features a unique asymmetrical design, with a selected look of a single cable plane. A single 155-ft-tall inclined pylon provides the upper support for the cables, which form an eccentric plane and are anchored at the lower end to a tapered, trapezoidal, single-cell steel box girder.

The back span balances the forces imposed by the forestays and anchors into a deadman/abutment. The welded steel, trapezoidal box girder carries the variable-width deck slab. The project incorporates structure. Each portion of the project, including abutments, entry plazas, barriers, and fencing employs architectural finishes with three-dimensional variations, and is therefore highly stylized aesthetically.

The bridge lies on a tangent horizontal alignment. The western span expands from 15 ft, 3 in. to 21 ft, 6 in. while the shorter eastern span widens even more dramatically, from 21 ft, 6 in. to 34 ft. The pedestrian walkway entrance and exit grades of the vertical profile are at 5% grades and are connected by a 200-ft crest vertical curve whose midpoint is located near the pylon. The minimum vertical clearance to the closest underlying roadway is 16 ft, 10 3⁄8 in. at the eastern abutment.

The structural system—a single-cell box girder superstructure—is supported at the westerly forespan by stay cables anchored eccentrically to the girder shear center at the northern girder web. The eastern back span is self-supporting and also transmits compression forces introduced by the westerly forestays to the east abutment.

2010: Curved steel played a critical role in the design of the Kauffman Center for the Performing Arts in Kansas City, Mo.

2010: Panelized construction sped completion of a residence hall for Southern Nazarene University in Bethany, Okla.
1961: Modern Steel Construction debuts as 16-page periodical, William C. Brooks serves as first editor.

1961: A36 introduced

1961: High-strength steel makes its North American debut on the One East Wacker Dr. building in Chicago; coincidentally, AISC moved its headquarters to this building in 1989.

1962: Steel designers are introduced to a new shape when steel tubes make their first appearance in MSC in an article entitled “New Member Joins Structural Family.”

1963: Leslie N. Gillette begins serving intermittently as acting editor of Modern Steel Construction.

1963: In a discussion that persists today, MSC asks “How quiet are steel floors” and discusses methods of mitigating sound transmittal in steel-framed buildings.

1963: Parking structures were a growing market and AISC showcased several projects using high-strength steel to minimize columns and reduce costs.
1964: The World Trade Center stirred the imagination of everyone who wondered how high a building could go.

1964: AISC unveils a new technical publication, Engineering Journal.

1964: The future is now. MSC discusses the potential use of digital computers for engineering calculations.

1965: Zinc rich coatings gain popularity as the coating is used on a rehab of the Golden Gate Bridge.

1965: Leslie N. Gillette returns as acting editor of MSC.

1965: Steel's advantage in office building design is evident in the Continental Center project, which featured 42-ft square bay spacing—a previously unheard of figure in Chicago.

1965: With 125,000,000 cubic feet of enclosed space, the Vertical Assembly Building (used to build the 362-ft high Saturn rocket) at the Kennedy Space Center is touted as the world's largest building.

1965: The Verrazano-Narrows Bridge receives a special award from AISC for its “outstanding achievement in technology and aesthetics.”

1963: MSC looks at the future and discusses the possibility of using “electric computers” for steel detailing.


1965: Steel's advantage in office building design is evident in the Continental Center project, which featured 42-ft square bay spacing—a previously unheard of figure in Chicago.
1966: Daniel Farb named editor of MSC.

1966: Despite high freight costs, steel proved to be most economical material for the 10-story Federal Aviation Agency office building, the first steel high-rise in Hawaii.

1967: Setting what might be a record for a building of its size, a 2.6-million-sq.-ft Chrysler plant was designed and constructed in just 11 months.

1968: A572 is introduced.

1968: In an effort to capture more of the multistory residential market, the steel industry introduces an open-web steel joist system with gypsum plank for apartment construction.

1968: The United States Pavilion at EXPO '67, received an AISC Special Achievement Award for "an outstanding achievement in technology and aesthetics."

1969: 888 7th Ave. in New York is an early use of composite construction.

1970: Dan Farb named AISC Director of Publications; Mary Anne Donohue named Editor of MSC.

1970: MSC touts the use of weathering steel for short-span steel bridges.

1970: AISC/AISI announce the development of a computer program for column design.
1970: AISC announces a new award: The T.R. Higgins Lectureship Award. The first winner is Egor Popov in 1972 for his lecture on “Connections Cyclic Reversal.”

1971: Load Factor Design is introduced for steel bridges.

1970: The designers of the Bell Telephone Building in Pittsburgh use 100 ksi steel for its X-bracing.

1970: The Standard Oil Building (now Aon Center) rises in Chicago; it features the first steel shell tube and at 1,136 ft. it was the fourth tallest building in the world when completed in 1973.

1970: MSC touts the use of weathering steel for short-span steel bridges.

1972: St. Louis’ Eads Bridge is designated a national historic landmark.

1971: Both the John Hancock Building in Chicago and the U.S. Steel Building in Pittsburgh are among the structures honored in AISC’s Architectural Awards of Excellence.

1971: Spray-applied fire protection is introduced after its efficacy is demonstrated in a 1970 UL test.

1972: MSC introduces its readers to the concept of concrete-filled steel tubes for high-rise buildings.
1973: Fazlur Khan is presented with the J. Lloyd Kimbrough medal, AISC’s highest honor.

1974: Mary Anne Stockwell takes over as editor of MSC.

1975: The Sears Tower wins an Architectural Award of Excellence.

1973: The Latah Creek Canyon Bridge in Spokane is an early example of a steel box girder bridge.

1973: The first coverage of AISI’s Scranton fire tests, which demonstrate that fire protection is not needed in open-air steel parking structures.

1973: The Chesapeake Bay Bridge combines four steel systems to create an incredibly economical bridge: continuous welded girder spans, suspension bridge, deck cantilever truss spans, and through cantilever truss spans.

1973: The Sitka Harbor Bridge in Alaska is the first cable stayed vehicular bridge in the U.S.

1974: The Sitka Harbor Bridge in Alaska is the first cable stayed vehicular bridge in the U.S.

1974: The 590-space Faulkner Hospital Garage in Jamaica Plain, Mass., is billed as the nation’s first steel-concrete composite garage; the innovative design saved $300,000 over the concrete alternate.

1974: The 12-story Ramada Inn in Los Angeles is one of the first buildings to feature a Skipcon System (a type of staggered truss).
1975: MSC discusses the impact of E119 on steel construction and the provisions for credit of the use of sprinklers.

1976: The Sears Tower wins an Architectural Award of Excellence.

1976: The Russian Residence in New York City utilizes a slip form concrete core and a unique top-down construction technique.

1977: The landmark Los Angeles Bonaventure Hotel features a cluster of five towers, all tied together to meet seismic design requirements.

1978: AISC introduces the AISC Quality Certification Program.

1978: The 56-story First International office building in Dallas features a trussed tube design with diagonal X-bracing and stub girders.

1978: The Federal Reserve Bank of Boston utilized an X-braced "supertruss" design.

1979: Demonstrating that no one is perfect, the New River Gorge Bridge in Fayetteville, W.Va., only receives a merit award in the AISC Prize Bridge Award competition.
1980: George E. Harper begins his tenure as editor of MSC.

1980: The O’Connor Hospital in San Jose, Calif., is an early use of eccentric braced frames for seismic design.

1981: One Corporate Center in Hartford, Conn., demonstrates the growing trend toward vertical expansions as it rises 16 stories on top of an existing building.

1982: The first ads appear in MSC: Nicholas J. Bouras (now owned by Commercial Metals Company), TRW Nelson, W.A. Whitney, Cooper & Turner (now TurnaSure), and St. Louis Screw & Bolt.

1982: MSC features Philip Johnson’s controversial design for the AT&T Headquarters Building (now the Sony Building) in New York City.

1982: Continuing its tradition of publishing practical information, MSC features an article on “How to Fasten Steel Deck.”

1983: Michigan bans weathering steel prompting a multi-state study and new details that vastly improve the performance of this material that results in its renewed use.

1983: First AISC/AIA Student Design Competition.

1983: The Barnes Building Rehabilitation team touts their extensive use of computer analysis using STAAD-III.

1983: Four Allen Center in Houston is designed as a circue-ovular building to reduce wind loads.

1983: National Bureau of Standards and AISI conduct tests that confirm the accuracy of FASBuS II fire computer modeling.

1980: The Kennedy Space Center ignites the dreams of every child.

1981: The first ads appear in MSC.
1985: Fast track construction is all the rage; the 172,000-sq-ft Federal Express storage facility in Memphis goes from ground breaking to occupancy in just nine months.

1984: Maria von Trapp (yes, from the Sound of Music) looks over the steel framing for the new von Trapp Family Lodge in Stowe, Vt.

1986: The AISC Shapes Database is created for use on PCs.

1985: For the first time, estimates put computer use in structural engineering firms at greater than 50%.

1986: LRFD debuts and quickly becomes an obsession with MSC editors.

1986: The staggered truss system makes a comeback and is used on the 40-story Resorts International hotel in Atlantic City.

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1985: Since 1980, bidding alternate designs has gained in popularity and has allowed steel to be more competitive, resulting in such structures as the I-20/I-459 Interchange in Jefferson County, Ala.

1987: MSC increases its frequency from 4x to 6x a year.

1987: The AISC Steel Sculpture is created by Duane Ellifritt at the University of Florida.

1986: The United Airlines terminal in Chicago helped popularize both the use of curved steel tubes and exposed structural steel.

1987: The Quaker Tower in Chicago uses its central core as its complete lateral load resisting system.
1989: National Engineering Conference and the Conference of Operating Personnel join to become the National Steel Construction Conference (which would evolve into today's NASCC: The Steel Conference).

1989: Snug-tight bolt provisions are promulgated.

1989: AISC issues 9th edition ASD Manual; sells 60,000 copies in one year.

1990: Scott Melnick named editor of MSC.

1990: Cooper Chapel in Bella Vista, Ark., is arguably the most beautiful use of exposed structural steel ever.

1990: Pilot Field in Buffalo ushers in a new era of stadium design featuring exposed structural steel. The design proves popular and is a forerunner to most of the major league ballparks built since then, including Camden Yards in Baltimore, the Cleveland Indians Stadium, PNC Park in Pittsburgh, Coors Field in Denver, and the Rangers Ballpark in Arlington.

1990: Setbacks required by the New York City zoning code required the use of 84 transfer girders on the 35-story 750 Seventh Ave. building.

1990: The bridge on State Route 739 over US33 in Union County, Ohio, was an early adopter of integral abutments.

1988: A tube of wide flange sections creates an “infinity room” and a new tourist attraction at the House on the Rock in Spring Green, Wis.

1988: LRFD is just starting to show up on projects. The designers of the AEGIS pre-commissioning building in Bath, Me., report that using LRFD reduced the weight of the structure by around 10% and that the learning curve to switch from ASD to LRFD was “not severe.”

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1988: A tube of wide flange sections creates an “infinity room” and a new tourist attraction at the House on the Rock in Spring Green, Wis.
1991: The Morton International Building in Chicago was built over active railroad tracks. As a result, the entire structure is suspended from huge exterior overhead trusses.

1991: MSC makes its first references to Electronic Data Interchange (EDI), the precursor to today’s BIM.

1991: MSC begins publishing monthly.

1992: From groundbreaking to occupancy took only 22 months on the 1.2 million sq. ft. GTE Telephone Operations Center in Dallas. The building was designed using LRFD and featured A572 Gr. 50 steel.

1992: The Boston University Medical Center Campus is one of the first buildings designed using the new AISC LRFD Seismic Provisions.

1992: Parallel chord trusses on the Cooper River Bridge helped to create one of the nation’s most beautiful bridges.

1992: The Alsea Bay Bridge replacement was noteworthy for its economic design but it was the bridge’s outstanding aesthetics that earned it a Prize Bridge Award.

1993: A feature story on Lev Zeltin (written before his death but published afterwards) starts a series of profiles in MSC. Other notables featured include: Bill LeMessurier, Stan Lindsay, Eli Cohn, Larry Griffis, Richard Weingardt, Bob Disque, and Shankar Nair.

1993: Active bracing systems come through their full-scale testing with flying colors.

1993: MSC focuses an entire issue on design responsibility following a day-long session at the NSCC.

1993: MSC introduces an annual listing of shape availability. The list has since moved to the AISC website and rather than being updated yearly, it’s now updated each time a producer makes a change.

1993: The use of in-wall beams and web openings for mechanical ductwork allowed the designers of Harborside Hyatt in Boston to achieve an 8 ft 9 in. floor-to-floor height while also beating concrete on cost.