8/22/19 - Judge JANET C. BOSTWICK - CV 2017-0819 - WESTCHESTER FIRE INSURANCE COMPANY; STARR SURPLUS LINES INSURANCE COMPANY; CHUBB CUSTOM INSURANCE COMPANY; IRONSHORE SPECIALTY INSURANCE COMPANY;

EXPERTS . . . The Trial Reporter

STEADFAST INSURANCE COMPANY; FAIR **INSURANCE** SELECT AMERICAN COMPANY; and STATE OF ARIZONA, Intervenor (Paul Barrett Kiernan, Jr., of Cozen O'Connor, of San Diego, California) v LITHE TECHNOLOGY, L.L.C. (Douglas W. Glasson of Curl, Glasson & Patrascioiu, P.L.C.) -**ASTRONOMY** PROPERTY DAMAGE Prologue: The Tokyo Atacama MIRROR. Observatory (TAO) mirror, a large astronomy mirror, was being manufactured by the Mirror Laboratory at Intervenor's University of Arizona. Non-party Hagen was employed as a computer programmer by Dfnt, a two-man engineering company, working as an outside contractor for Intervenor's University of Arizona. *Non-party* Hagen was working on new software which was being installed as part of a major upgrade to the Large Optical Generator. The TAO mirror was stored or "parked" on the Large Optical Generator in order to facilitate the movement of other mirrors in the Mirror Laboratory, while non-party Hagen was working on the Large Optical Generator. Case being tried on compar-Plntfs alleged Dfnt negligently ative fault. damaged the TAO mirror when non-party Hagen decided to work on debugging the new Large Optical Generator software while the TAO mirror was stored on it, causing damage to the TAO Dfnt denied liability, advancing the mirror. defense that non-party Hagen was just trying to perform his occupational duties under difficult circumstances at the time of the accident. Dfnt argued the Mirror Laboratory management was at fault for the accident because they "parked" or stored the TAO mirror on the Large Optical Generator when they knew non-party Hagen would be working on the Large Optical Generator upgrade. Dfnt also argued the Large Optical Generator had not been checked, vetted, or released for grinding mirrors, and it was an unsafe and unacceptable risk to require non-party Hagen to continue debugging the software while the TAO mirror was stored on the Large Optical Dfnt argued Intervenor's University Generator.

of Arizona's own investigation report identified multiple factors that contributed to the accident, including the lack of mirror protection safety features on the Large Optical Generator machine, inadequate risk management by the Mirror Laboratory management, unclear understanding of responsibility for mirror safety, inadequate space in the Mirror Laboratory to enable unhindered work on the Large Optical Generator upgrade during mirror moves, inadequate analysis of failure modes for the mist containment beam, and insufficient management support mechanisms for the Associate Director of Steward Observatory's span of control. Dfnt called Darko Babic, a material sciences expert, who was of the opinion that the TAO mirror was damaged by the impact of the mist containment beam during the software upgrade work; the debugging process resulted in the spindle loading the mist containment beam, which fractured the screws, releasing the stored energy in the screws suddenly and caused the beam to impact the TAO mirror; and the fracture of the screws likely occurred with little warning to operator. It was also Mr. Babic's opinion that the design of the Large Optical Generator system and the mist containment system contributed to the incident because they did not provide any warning to the operator of the impending failure. Additionally, it was Mr. Babic's opinion that an alternative design of the mist containment system, which was implemented after the instant incident, would have likely given audible and visual warning to the operator that the spindle had contacted the mist containment beam and the structural integrity of the beam had been compromised. Mr. Babic opined that the Mirror Laboratory is not constructed as a streamlined manufacturing facility, which significantly affects operations, and was a contributing factor to the mirror damage. It was also Mr. Babic's opinion that the management structure of the Mirror Laboratory also contributed to the incident because no one person was responsible for mirror movement, storage, and transport. Plntfs

sought \$1,387,433.69 in property damage, which included \$910,389.40 in direct costs for labor, materials, and equipment, plus \$477,044.29 in indirect costs for the fifty-two-and-one-half percent the federal government required Intervenor's University of Arizona to charge on all federally "sponsored projects". Dfnt called P. Gregg Curry, C.P.A., C.F.F., a financial forensics expert, who was of the opinion that Plntfs failed to establish that the \$477,044 in indirect costs represented an actual economic damage to the Mirror Laboratory. It was also Mr. Curry's opinion that Plntfs failed to produce documentation and/or information to support the actual overhead costs associated with the mirror repair and that, without such information, there was no basis to determine whether the indirect costs were reasonable or reflect the actual indirect costs incurred relative to the mirror's repair efforts. Additionally, it was Mr. Curry's opinion that Plntfs failed to establish that the alleged indirect costs would not have been incurred by the Mirror Laboratory absent the damage to the mirror and related repair efforts.

Mr. Curry opined that, to the extent the Mirror Laboratory would have incurred indirect costs, regardless of whether the damage to the mirror occurred, the \$477,044 does not represent an actual economic damage. Prayer: \$1,387,433.69 property damage. Plntfs made a pretrial demand of \$1,200,000 - Dfnt made a \$182,077.80 offer (Carrier: State Farm Insurof judgment (D). ance.) During closing arguments, Plntfs' counsel asked jury to award Plntfs \$1,387,433.69, representing \$1,333,365.90 paid by the six Plntf insurance carriers and \$54,067.70 paid by Defense counsel Intervenor State of Arizona. argued liability. Six day trial. Jury out elevenplus hours, over a two-day period. AWARDED ARIZONA **STATE** OF INTERVENOR DAMAGE, AND PROPERTY \$47,131.09 **INSURANCE** SIX **PLNTF AWARDED** DAMAGE. **PROPERTY CARRIERS** \$0 (Found Intervenor State of UNANIMOUSLY. Arizona to be eighty-seven-and-one-half percent at fault and Dfnt to be twelve-and-one-half percent at fault; therefore, Intervenor State of Arizona's award to be reduced to \$5,891.39.) \*\*\*\*\*\*\*\*\*\*\*\*\*\*