



Lane Bos Principal Risk Engineer

Lane joined IMIU as Principal Risk Engineer in August 2011. Lane has extensive experience in the specialised field of mining risk engineering and spent 7 years serving in a similar role with Zurich Services Corporation.

Lane attended Montana State University, graduating in 1992 with a bachelor's degree in mechanical engineering (highest honours). He was also named as top mechanical engineer of his class. Whilst attending University, Lane had a desire to see the world and signed on in the US Navy Nuclear Propulsion Officer Candidate program in 1990. On leaving Montana University Lane received his commission in the US Navy, after attending Officer Candidate School.

Whilst in the Navy, Lane attended advanced schooling and field training in nuclear power plant operations as well as the Submarine Officer Basic Course. Lane served a 3-year assignment as submarine officer (1994-1997) aboard the USS Georgia where he achieved qualification as a Naval Nuclear Engineer. Following this tour, Lane went on to spend two years in Washington DC (1997-1999) assigned to the Strategic Systems Weapons Program where he held the position of Missile Branch Fleet Liaison Officer. His responsibilities included communications and planning of maintenance, technical support, and logistics of all Trident Fleet Ballistic Missiles in the US and UK submarine fleets.

Lane left active Naval service in 1999 (after 9 years of service) in order to spend more time with his wife and children. He remained actively serving in the US Navy Reserve, until his retirement at the rank of Lieutenant Commander in July 2011. Lane sought out a new career where he might use his engineering, maintenance and operations experience that was close to his home state of Montana.

Lane started the next part of his career at the Rosebud Mine in Colstrip, Montana. Rosebud was the second largest coal mine in Montana, producing 12 million tons of coal per year and operating a fleet of 4 large Marion draglines. Lane held positions of Maintenance Engineer and Maintenance Supervisor. He achieved certification as mine foreman. In this position he was responsible for the daily operations of a maintenance shop and crew of 20; as well as scheduling, monitoring, and coordination of maintenance activities on mine equipment; capital purchases and project engineer. While at the Rosebud Mine, Lane coordinated the conduct of a site risk assessment performed by the mine's insurance company, Zurich Insurance.

Following 5 years at Rosebud Mine, Lane decided to change career and move into risk engineering. He joined Zurich, who were expanding their mining risk engineering capabilities, and had sought him out after meeting him during the risk survey at Rosebud. Lane held the position of Senior Risk Engineer, as well as Mining Industry Practice Leader for Zurich's North American Risk Engineering Division.



Whilst at Zurich, Lane provided consulting services to the Global Mining and Mineral Processing Industry. These services included conducting mining specific property and machinery breakdown and casualty (workers' health and safety, and third party liability) exposure assessments at Zurich's customers mining operations. Through these assessments, "advice for risk improvement", based on industry specific knowledge and insight, was provided to the customer, allowing them to take a proactive approach to reducing potential exposure to mining losses. Additionally, he provided construction risk services, performing both Hazard Analysis facilitation and project site assessments, to reduce risks during and after project completion. During this time, Lane was also a member of Zurich's Global Mining Center of Expertise.

Risk engineering in the Mining industry is a small world and as such, Lane was very familiar with IMIU's business operation and engineers. So in 2011, it was evident to both IMIU and Lane that an excellent opportunity existed for both and subsequently Lane joined IMIU as Principal Risk Engineer.

Lane has a strong interest in developments within the Mining Industry. He has been a panel member at the ABB Gearless Mill Drive Users Meeting (2010) and also co-author of a white paper 'Insurability of Large Gearless Mill Drives' which is has been presented at the Global SAG Conference (2011). Lane has also been quoted in October 2010 'Business Insurance Magazine'. More recently, Lane serves as an active member of the Mining Insurance Risk Association (MIRA), Technical/Engineering working group.

## Awards & Qualifications

- Bachelor of Engineering in Mechanical Engineering, Montana State University (1992)
- Qualified Naval Nuclear Engineer (1996)
- Certified Mine Foreman (Montana 2003)
- Zurich Basic and Intermediate Fire Protection Courses (2004)
- Zurich Hazard Analysis Team Leader (2007)
- Zurich International Risk Engineering Course (2009)
- Zurich Risk Engineer of the Year (2009)

Lane is married and father of three grown daughters. His favourite leisure activities include mountain biking, road cycling, downhill skiing, camping, boating, and using his John Deere tractor. Lane is also a football fanatic (not the American type), following the English Premier League, EUFA Champions League and FIFA World Cup. At home he will occasionally play the game on a horse pasture turned into football pitch.