

**STRUCTURAL RISK ASSESSMENT AND MANAGEMENT**

Since its launch in 2009, **ST**ructural **R**isk **A**ssessment **A**nd **M**anagement (STRAAM) projects have spanned a wide variety of structures throughout the world, including the preservation of endangered buildings adjacent to excavations, dams, hyperbolic cooling towers, rail and roadway bridges, wind turbines, and ports (jetties, mooring dolphins, docks).

STRAAM's technological advance, real-time dynamic structural monitoring, involves recording vibrational patterns made by structures as they move. Normal movement caused by wind, thermal expansion and contraction, earth movement or other causes is sufficient to set even massive structures in motion. Each structure has a unique 'vibrational signature.' This complex of patterns can be detected and recorded by STRAAM's highly sensitive accelerometers. The process is called a "structurocardiogram" (SKG) because, like the electrocardiogram used to graph performance of the human heart, it reveals things that can't be seen.

Vibrations from all parts of a structure are superimposed on one another, but they can be separated into their individual components by specialized computer analysis. They can then be compared with STRAAM's large data-base of vibrational signatures of other structures. Using this data in conjunction with 3-D computer modeling, STRAAM can pinpoint where structural elements and connections are performing properly, where they are failing, and whether the condition is stable or changing.

STRAAM's method is both faster and more economical than conventional structural monitoring methods using multiple sensor placements. Significant performance data can be collected in time-periods measured in minutes instead of weeks. Moreover, it delivers a much more detailed picture of the inner workings of the structure.

The technology can be applied proactively, to take a healthy-structure baseline reading that will enable faster and more accurate analysis in the event that problems develop, or after a traumatic event such as an earthquake or explosion.

**STRAAM Corporation – Structural Risk Assessment And Management** – is the only company worldwide offering real-time dynamic structural monitoring to diagnose the structural soundness and health of buildings, dams, bridges, towers, marine installations and other critical infrastructure. The STRAAM Protocols apply advanced, real-time monitoring to detect the natural vibrations of a structure. Using that data, STRAAM can quickly and efficiently pinpoint problems, assess damage, and predict risk of failure. STRAAM assessments provide owners, engineers, contractors and public safety agencies with detailed, reliable information that can lead to engineering solutions and cost-effective business decisions, restoring confidence in a structure's integrity.

For more information, please visit **[www.STRAAM.com](http://www.STRAAM.com)**.

*For high resolution images, to arrange interviews, or for more information, please contact Steve Miller, Chusid Associates, [steven@chusid.com](mailto:steven@chusid.com) +1 818-774-0003*

**STRUCTURES TESTED**

Brasilia TV Tower	Brazil
Paracata Mill	Brazil
Mosquitos Bridge	Brazil
Capivari Bridge	Brazil
Tubarao Iron Ore facility	Brazil
Castelao Football Stadium	Brazil
Gymnasium	Brazil
Cais 88	Brazil
Areal Dam	Brazil
Itaipava Dam	Brazil
Woodsville Flyover	Singapore
Bukit A condominium	Malaysia
General Electric Facility	Malaysia
Sime Darby Building	Malaysia
Guangdong International	Guangzhou, China
Guangdong TV Broadcasting	Guangzhou, China
Di Wang Tower	Shenzhen, China
Ronan Point	London, England
John Russell Court	Edinburgh, Scotland
Garibaldi College	Clipstone, England
People's College	Nottingham, England
Priory Hall	Coventry, England
South Stoneham House	Sutton, England
Brekit House	Watford, England
Leicester Univ. Tower	Leicester, England
Sutherland House	London, England
Exeter 6th form college	Exeter, England
Dunstan Flour Mill	Middlesbrough, England
National Westminster Tower	London, England
Sheffield Arts Tower	Sheffield, England
St Peter's House	Oldham, England
British Rail Building	Plymouth, England
Civic Centre	Plymouth, England
Nautical College	Plymouth, England
Drax Chimney	Yorkshire, England
Pembroke Chimney	Wales
Fawley Chimney	Wales
Celyn Dam	Wales
Clywedog Dam	Wales
Contra Dam	Switzerland
Zervreila Dam	Switzerland
Lower Glendevon Dam	Sterling, Scotland
Upper Glendevon Dam	Sterling, Scotland
Emosson Dam	Valais, Switzerland
Wimbleball Dam	Somerset, England
Baitings Dam	Ripponden, England
Llyn Brianne Dam	Wales
Wimbleball Dam	Dorset, England
Kaoshiung Wharf	Kaoshiung, Taiwan
LIRR Viaduct	Brooklyn, NY - U.S.A.
Newark AirTrain	Newark, NJ - U.S.A.
High Rise Building	Indianapolis, Indiana - U.S.A.