



STATNAMIC Testing Newsletter

by Applied Foundation Testing



STATNAMIC is Booming — AFT Nearing 10 Years

Special Points of Interest:

- First News Letter
- Evolution of Equipment
- Hydraulic Catch Mechanism
- Mechanical Catch Mechanism
- Increase Test Capacity to 40MN
- Other Testing Services

**STATNAMIC
Invented 1989**

Pun intended! Applied Foundation Testing is in its 9th year in business providing Statnamic load testing and is pleased to announce our first STATNAMIC news letter. This informational letter is provided to show you only a narrow glimpse of its various applications over the past 9 years.

Our company was formed January 2, 1997 by Don Robertson and Mike Muchard after becoming the United States representative for the technology invented by Berminghammer. AFT has now been in business for 9 years providing STATNAMIC load testing.

AFT has performed nearly 1000 STATNAMIC load tests all over the United States, Canada and the Caribbean. The testing equipment and instrumentation has evolved in efficiency, accuracy and capacity. But more importantly, analysis methods have been developed which now provide very high reliability.

AFT was formed with the intention to provide high quality independent STATNAMIC testing services. But have expanded our services over the years to many other foundation quality assurance testing methods.



1997 — AFT's first STATNAMIC load test. Testing H-Pile for a Bridge project in Poplar Bluff, Missouri, MoDOT using a gravel catch system.

Evolution of STATNAMIC Equipment

**From Micro-piles to
Huge Drilled Shafts**

**STATNAMIC
Has Risen to
the Challenge**

STATNAMIC load testing is performed using a variety of equipment on a multitude of foundation types. One of the most significant equipment developments was the hydraulic catch mechanism.

With the introduction of the catch mechanism, Statnamic load testing

was taken to a new level of efficiency and even greater cost effectiveness. Catch mechanism load tests have been conducted over-water, underwater, inside coffer dams, inside buildings, within highway medians, and on so many routine projects.

1999 — With the introduction of the hydraulic catch mechanism STATNAMIC load testing was taken to a new level of efficiency and cost effectiveness.



STATNAMIC = VERSATILITY



Catch mechanism
STATNAMIC load test on an
18" square concrete pile
within a coffer dam.
US Army Corps of Engineers.



Catch mechanism
STATNAMIC load test on
pipe piles inside an
automobile factory.
Illinois



Catch mechanism STATNAMIC
load testing amongst a forest
of Augercast piles.
Daytona Beach, Florida

LATERAL STATNAMIC load
testing of a drilled shaft over
water. Ohio Department of
Transportation



From the Gulf of Mexico to the Frozen Tundra



16 MN Catch mechanism testing 54" diameter spun cast cylinder piles.

In the year 2001, a larger Mechanical catch mechanism was developed to answer our clients needs. It made its debut at the St. George Island bridge project. The bridge was constructed over the very environmentally sensitive Apalachicola Bay, one of the most fertile oyster habitats in the world. The contractor Boh Brothers devised a falsework support system for the STATNAMIC device which minimized environmental impact to the bay floor while increasing efficiency.

The 16 MN device has performed hundreds of load tests all over North America. East Coast to West Coast and from the Gulf to the Permafrost.



Load testing drilled shafts with 16 MN Catch mechanism Ft. McMurray, Canada (600 miles north of Montana)

High Capacity STATNAMIC Load Testing

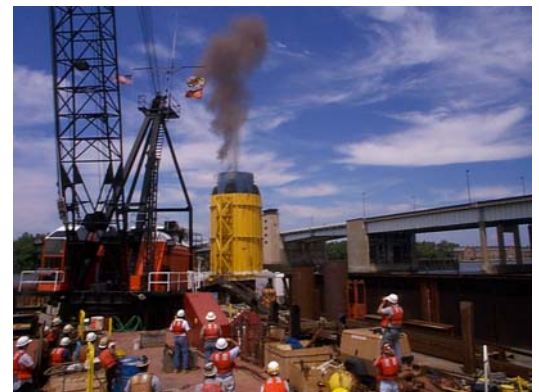
The equipment development progressed very rapidly. From idea to 30 MN (3400 tons) in 3 years. The first 30 MN STATNAMIC device was constructed for the Japanese in 1992. The first 30 MN STATNAMIC test in the USA was performed in 1994 at the New River Bridge design phase load test program in New Bern, North Carolina. The drilled shafts and STATNAMIC tests were performed by Long Foundation Drilling Co. for the North Carolina Department of Transportation.

1994 was a busy year for 30MN STATNAMIC testing in the USA. The 30 MN went on to the Victory Bridge in the Florida Panhandle and from there to the Gandy Bridge and Hillsborough River Bridge in Tampa.

Shortly after AFT was formed, the largest 30MN STATNAMIC load test program to date was performed. The project was the 17th Street Causeway Bridge Replacement in Ft. Lauderdale, Florida constructed by the Florida Department of Transportation. The load test program included six (6) 30 MN STATNAMIC load tests on 48" diameter drilled shafts.

The STATNAMIC test capacity has increased to 40MN (4,500 tons).

"AFT's first contract 30 MN load test program. 17th Street Causeway Bridge Replacement 1998"



30 MN testing 42" diameter pipe pile. Woodrow Wilson Bridge. Washington, DC.

Applied Foundation Testing



STATNAMIC

*We are always interested in discussing your foundation load testing needs. Call **Mike Muchard**, **Don Robertson** or **Tom Santee** to hear more about the advantages of STATNAMIC load testing technology as well as our other services.*

Mike Muchard—(727) 376 5040—Tampa, FL.

Don Robertson—(904) 284 1337—Jacksonville, FL.

Tom Santee—(919) 654 7381 Raleigh, N.C.

In subsequent issues we will keep STATNAMIC users informed on various interesting projects where STATNAMIC was used as well as provide commentary on pertinent STATNAMIC issues.

Additional Foundation Testing Services from AFT

AFT can compliment your team with our specialty test methods:

- STATNAMIC® Load Testing
- Dynamic Pile Testing (PDA®, CAPWAP®, Wave Equation)
- Smartpile® Wireless Dynamic Pile Testing
- Static Load Testing (equipment and monitoring)
- Geotechnical and Structural Instrumentation
- Miniature Drilled Shaft Inspection Device (Mini-SID)
- Crosshole Sonic Logging (CSL & Tomography)
- Pile Integrity Testing (PIT, SIT, Sonic Echo)
- Post Grouted Drilled Shafts
- Unknown Bridge Foundation Investigations - Parallel Seismic, Sonic Echo
- Vibration Monitoring
- Pile Driving Inspection
- Drilled Shaft Inspection



PDA Testing



Crosshole Sonic Logging



Static Load testing



Shaft Inspection Device



Instrumentation

Lateral Static Load testing

