

The logo for Ultra.news features a stylized blue graphic on the left consisting of a curved line and a vertical bar. To the right of this graphic, the word "Ultra" is written in a large, bold, black sans-serif font, followed by ".news" in a smaller, regular weight of the same font.

Ultra.news

August 1995

Issue 2

The Modern Modem

At Ultramarine, we encourage the use of the modem for transmitting data to us. This is particularly useful when providing user support. Most of the time, we can diagnose a problem over the phone, or we will create our own test case that illustrates the reported symptom. From this test case, we can usually see where the problem lies and correct it.

For those times when these techniques simply do not work, receiving the user data by modem is invaluable. We do this routinely, and typically transmit 1Mb of data across the Atlantic in less than 12 minutes, using 14,440 bps modems. This method allows us to look over your information and correct it in a dramatically shorter time span than any other route. And as always, the connection and transmission requests are initiated on the user end, so security should not be a concern.

Our "Customer First" Promise

Our priorities are set by our users. Ultramarine's first priority is the integrity of our products. When a user reports a program error, it is fixed immediately. This is in contrast to other software offerings, where a running list of known bugs is used.

Ultramarine's second priority is the continuing development of our software. We are constantly working on ways to improve our products by adding new features and enhancements. We always strive to keep our products one step beyond the state of the art.

When we are doing the development for ourselves, we determine which enhancement gets our attention first. However, when our clients ask for a particular program enhancement and pay for it, then they set the priority for its development.

This is our way of showing you our appreciation for using our software. We will always put the customer first in our company. Your asking for additional enhancements to our software enables us to make appropriate decisions on what is most important.

Did you know?

Some of you may not be aware of the fact that Ultramarine provides analytical services as well as innovative software.

This is a service that we provide to those clients who do not use our software or possess the expertise to solve a particular problem. However, this goes beyond our normal consulting services.

From these clients, we get invaluable feedback for the further development of our software and we get to see some very interesting projects.

If you have any questions about these services we offer, please call us so we can get you the information you desire.

In the News...

Our Feature Presentation - A good look at why our business works.

MOSES Revisions - What's coming in the next release.

Frequently asked Questions - Specific and general answers.

Welcome New Users - working with our software.

Recent Projects - Using Ultramarine software.

Our feature presentation...

In this issue we would like to recognize someone very important to our company. She has been employed with Ultramarine since January of 1983. Her name is Pattie Brune and she is the voice that greets you when you call. However, after twelve years, Pattie is much more than a voice on the other end of the line. In the simplest of terms, she keeps the office running smoothly.

Pattie is responsible for everything in the office other than the actual writing and revising of the programs. This includes deciphering the handwriting and misspellings of engineers, which is no simple task. She is always willing to help out in any situation around the office. It is hard to pinpoint everything she does, but let it suffice to say that if you need something, she can get it done immediately.

Pattie is our little southern belle. She is petite, with blond hair and blue eyes, and is one of the nicest people you could ever meet. She grew up in Katy, Texas, which is right outside of Houston. Her parents still live there as does her daughter. We wanted to take this opportunity to tell her how much she means to us, even though words cannot describe it. Thank you Pattie, for everything you do.

MOSES Revisions For release 5.02

Rev. 5.02 is a major release with several enhancements from the previous version. It is due out in its entirety by the end of the summer. Here are some of the highlights:

- In the Disposition Menu, several new commands have been added. The ADD_COLUMN command allows one to add data to the existing data base; the commands SPECTRUM and FFT will produce either a spectrum or Fourier transform from existing columns of data, and the CULL command allows one to truncate his original data.
- The #TABLE command allows the user to input his own wind and current force coefficients for a variety of headings.
- A new option -DYNAMIC has been added to the &COMPARTMENT command.
- A new type of connector, TUG_BOAT, has been added. Along with this connector, a new menu, REPOSITION, has been added.
- The following commands: &M_ANCHOR, &C_LENGTH, &CO_STAT, &LWAY, and &PIPE are now obsolete and have been replaced with a single command, &CONNECTOR.
- Rather than a single wind velocity, one now specifies an average wind, a profile rule, a gust rule and a gust duration to define the wind which will actually be applied to an element.
- Wind profiles with the type of ABS, API, NPD or POWER can be defined and gust rules of types API or NPD are allowed.
- The previous wind spectrum is no longer used; one now defines a wind spectrum type as API, HARRIS, DAVENPORT or OCHI.
- One can now specify directly on the &ENV command the periods he wishes to use with a -P_WAVE option.
- A new menu, HYDRODYNAMICS, has been created. This menu unifies treatment of the "hydrodynamic" data by providing a single place to create, modify, export, import and post-process diffraction type data.
- In this release, we have created a new menu, FREQ_RESP, so that one can compute frequency response and post-process it in the same menu.

Frequently asked Questions

General Questions:

Q: Why is Ultramarine not connected to the Internet?

A: For the kind of connection we want, the cost is prohibitive. We want a dedicated connection that would inform us immediately of any mail transmitted. Right now, the fax machine works quite nicely and we hear it beep from down the hall, telling us a fax has been received. We may ultimately consider a connection to the Internet after the cost goes down.

Q: Will Ultramarine ever consider using a graphical user interface?

A: Eventually, we will. There are several issues to consider here. First, with our text driven user interface, it is faster to use the language of the program to do most things rather than point and click with a mouse. Second, a graphics standard needs to emerge from the ones currently available, one that will work on all the machines we expect to use. Ultimately, we see a graphical user interface as an easy way to retrieve information from the data base. It would be nice to click on a member of a jacket model and display a variety of information for this member.

Q: Why are there so many revisions to Ultramarine's software?

A: We are responsive to our clients and try to accommodate user input and suggestions wherever possible. Very often, a client will need a particular change urgently. When this happens for several clients, the result is several software releases over the course of a year.

Specific Questions:

Q: Why doesn't the conversion between metric tons and kilo-newtons change when using SI units and changing the value for the acceleration of gravity in the program?

A: This confusion between mass and force units has more to do with the way SI units are typically used than with our software. In Europe, it seems common to use mass units to define a weight. As a convenience, our software allows this by accepting metric tons as a force measure. This is why changing the value of "g" has no effect on the difference between metric tons and kilo-newtons.

Q: Is it feasible to simulate a problem at model test tank scale?

A: No. There are several constants and factors embedded in the software that come from real size problems.

Q: When will EQUI_H and EQUI give the same result?

A: When there is no environment and no connectors in the system.

Q: Can I use a spring between two nodes of the same part?

A: Yes, this is allowed.

Q: Can I change the time step in the middle of a time domain solution?

A: No. The convolution used for the hydrodynamic coefficients does not allow for this. However, any time domain simulation can be stopped and then restarted with a different time step.

Q: Are the heave motions from the frequency domain coupled with rotations?

A: Yes.

Welcome New Users

Ultramarine would like to recognize the following new users and give you our promise to quality service for as long as you use our software.

Hyundai Heavy Industries, Ulsan, Korea
INTEC Engineering, Inc., Houston, Texas

Recent projects using Ultramarine Software

- Saipem UK has been using MOSES extensively on a variety of North Sea Projects, some of them requiring flexible barge analysis. These projects include Texaco Captain, Statoil SLT and SLB, ELF Claymore, Norsk Hydro Troll, Phillips Judy Joanne, BP Andrew, Amoco Davy / Bessemer, Texaco Erskine and Phillips Ekofisk 2 / 4.

- Motion studies with structural analyses were performed for the flare structures for the Smedvig and BP Foinavan FPSO's to be located in the North Sea.

Helpful numbers

Ultramarine, Inc.

Phone: 1-713-975-8146
Fax: 1-713-975-8179
Modem: 1-713-975-8184
Login: outsider

Ultramarine, Europe

Phone: 33-1-34-83-03-77
Fax: 33-1-30-46-21-10
Modem: 33-1-34-83-07-42
Login: outsider

Ultramarine, Inc.

3100 S. Gessner
Suite 325
Houston, Texas 77063