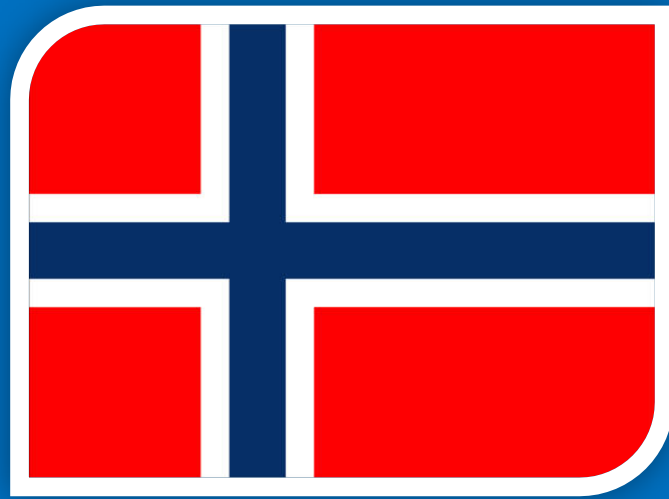


[60. NTHS]

Norway, 09th - 14th of April 2007

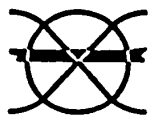


The Report

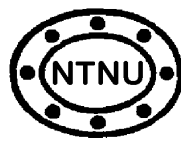
60. Nordiske Tekniske Høgskolers
Skipsbyggerkongress



Laivanrakentajain Kerho



Nul-kryds



Mannhullet



Kungliga
Skeppsällskapet



Chalmers
Skeppsbyggare

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INTRODUCTION

The snow has melted. The flowers have started blooming. Sailboats are again filling the ocean view. These are not the only signs of spring in the minds of the Nordic Naval Architecture / Marine Engineer student. For him and her, another event causes that tingling spring sensation: The NTHS congress is just around the corner!

The NTHS is short for “Nordiske Tekniske Høyskoleers Skipsbyggerkongress”. It is arranged every year to promote fraternisation, insight of the industry and future collaboration to students from 5 of the top Nordic technical universities. The formula is simple; 10 students from 5 universities meet a rich and comprehensive maritime cluster. They attend numerous company- and shipyard visits in the organising country and have great fun at night!

The order books are going to be full for many years in the yards and the industry is booming. None the less, each day we see the positive and negative influence from the globalisation. Our industry is under pressure, and the tendency of out-sourcing to low cost countries is increasing. This puts an internal pressure on our industry and on us. It is therefore of great importance to keep the Nordic strong with industry and competence in the Marine sector. The NTHS strengthens the friendship between the participating countries and maintain this stronghold.

You may say the formula is simple, but undoubtedly successful, as we this year is celebrating our 60th anniversary.



WL



WESTFAL - LARSEN

WORDS FROM THE 60TH NTHS PRESIDENT

The 60th anniversary NTHS has come to an end and the Norwegian delegation is proud to have been given the opportunity to host such great an event. Because it truly is great; I think very few student congresses or conferences can refer to a greater tradition than the NTHS. For 60 years, and still going strong, the NTHS has been arranged in the Nordic countries, creating a bond of marine brotherhood across the borders and giving students a chance to learn more about the Nordic marine industry.

Our world is getting smaller and the competition is getting harder. It is very interesting for us to get a first hand view at what challenges is brought upon us to still be able to maintain a strong and competitive marine industry in this small corner of the world. As Karl Wiklund at DNV told us at his lecture; the Nordic countries have always been in front when new technology has been developed, and it is our knowledge that has to make sure we stay in front.

Norwegian marine industry is scattered all along the Norwegian coast, making it impossible for us to cover it all. However, we have given our best effort to give all the participants a taste of what the marine industry in Norway has to offer, hoping everybody would find it interesting. The response from the delegations has been positive, making us confident everybody enjoyed their stay and that the congress was a success.

I would also like to use this opportunity to thank all of our sponsors who made it possible for us to arrange this year's congress and making it successful. Through this congress report we think the Norwegian shipping and marine industry has stated that they care about the future, and that they support the marine education and research. NTHS is not just a valuable experience for the delegates to get a broader perspective, but it also provides the sponsoring companies to profile themselves to students with different marine backgrounds.

Finally, I would like to thank all the Norwegian delegates for the time spent and the effort put in. It wouldn't have been possible to arrange the 60th NTHS without you!

"Keep up the good work!"



Ole Jørgen Aarvik

NTHS President

Det Norske Veritas gratulerer med 60-års jubileet og ønsker lykke til med årets kongress!



Etter fullførte studier er det DNV som tilbyr den mest spennende jobben!

Sjekk mulighetene på www.dnv.no



STATUTES (IN SWEDISH ONLY)

Stadgar för föreningen

Nordens Tekniska Högskolors Skeppsbyggare

Antagna vid den XIII:de kongressen i Köpenhamn med ändringar fram till 1997

-
- § 1. Föreningens namn är "Nordens Tekniska Högskolors Skeppsbyggare".
- § 2. Föreningens medlemmar utgörs av samtliga skeppsbyggare vid:
- | | |
|---|-------------|
| Danmarks Tekniske Universitet (DTU) | Köpenhamn |
| Chalmers Tekniska Högskola (CTH) | Göteborg |
| Kungliga Tekniska Högskolan (KTH) | Stockholm |
| Norges Tekniske Naturvitenskaplige Universitet (NTNU) | Trondheim |
| Tekniska högskolan i Finland | Helsingfors |
- § 3. Föreningens ändamål är att främja kontakten mellan medlemmarna, samt förmedla kunskaper inom skeppsteknik i de nordiska länderna.
- § 4. Föreningens styrelse består av sex ledamöter; president och kassör från den högskola som anordnar kongressen, samt en ordförande från varje högskola. Presidenten väljs av styrelsen, övriga ledamöter väljs av respektive högskola.
- § 5. Kongressen
- I Varje år skall en kongress anordnas i något av de fyra nordiska länderna. Medverkande högskolor turas om att stå för värdskapet.
 - II Varje medlemsland har rätt att delta med tio deltagare var. Om något land önskar delta med fler medlemmar får detta endast ske efter överenskommelse med värdlandet.
 - III Kongressen bör omfatta:
 - a. Föredrag följt av diskussion, samt studiebesök vid laboratorier, varv och andra i ndustrianläggningar.
 - b. Ett styrelsemöte, där styrelsen samt blivande ordföranden för varje högskola deltar. På mötet behandlas följande:
 - Val av nästa års president.
 - Beslut om tid och plats för nästa års kongress.
 - Eventuella stadgeändringar.
 - IV Inbjudan till kongressen skall sändas ut senast två månader innan kongressen äger rum och skall åtföljas av ett (preliminärt) program.
- § 6. Kongressens officiella språk är, så långt detta är möjligt, svenska.

- § 7. Medlemsavgift kan ej krävas. Eventuellt kan dock en deltagaravgift till kongressen begäras in, för att täcka kongressens utgifter. Föreningen får inte ta på sig något ekonomiskt ansvar.
- § 8. De olika högskolorna skall utbyta studiehandböcker där aktuella kurser samt litteratur inom skeppsteknik finns listade.
- § 9. Efter val av ny ordförande vid någon högskola skall övriga medverkande högskolor snarast informeras. Detsamma gäller om någon av högskolorna byter namn, adress eller telefonnummer.

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RULES AND REGULATIONS (IN SWEDISH ONLY)

- §1. Fysiskt och psykiskt våld får ej förekomma.
- §2. Det är strängt förbjudet att stjäla personlig egendom.
- §3. NTHS-fanan får ej stjälas.
- §4. Övriga regalier får stjälas först efter det att kongressen invigts samt fram till det att banquetten inleds.
- §5. Stulna regalier skall återlämnas offentligt under banquetten.
- §6. Eventuella souvenirer införskaffas med sådan stil och finess att dessa ej kan spåras till en NTHS-delegat, då vi är måna om vårt goda rykte som blivande skeppsbyggare.
- §7. Stimulerande lösningar av typen C₂H₅OH skall förvaras samt inmundigas med den diskreta elegans som endast en skeppsbyggare förvalter över.
- §8. De företag som besöks skall visas sådan respekt att arrangörerna kan se dem i ögonen även i fortsättningen.
- §9. Presidentens direktiv skall respekteras och alla skall följa arrangörernas planering.
- §10. Kommunikation under kongressen sker i möjligaste mån på svenska, vilket är NTHS officiella språk.



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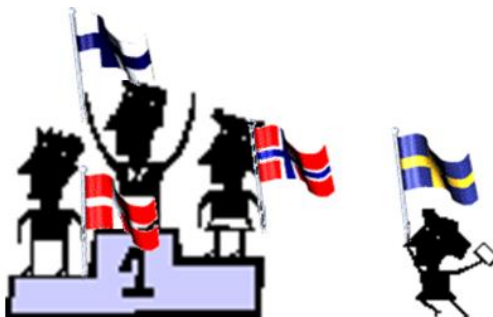
«DRUKKENBOLT»

Den NTHS-delegat som under veckan på det mest fascinerande sätt, med jämnt och kontinuerlig flöde lyckas inmundiga den största mängden alkoholhaltig dryck, med bibehållen angenäm och underhållande attityd samt ett rumsrent beteende erhåller den högaktningvärda titeln Drukkenbolt.

Observera dock att pinsamma nybörjarfasoner undanbedes. Denna utmaning bör endast antas av vältränade och erfarna dryckesbröder / systrar.

Drukkenbolts over the years:

2007	Trondheim	Finland, Risto Ajanko	
2006	Stockholm	Denmark, Rune Græsdal Zilcken	
2005	Helsinki	Finland, Jukka Ignatius	
2004	Gothenburg	Finland, Antti Mullykangas	
2003	Copenhagen	Finland, Mikko Vartiainen	
2002	Trondheim	Norway, Christian Compton	
2001	Stockholm	Finland, Heather Forsey	
2000	Helsinki	Finland, Janne Niittymäki	
1999	Copenhagen	Norway, Dsan Råmunddal	
1998	Gothenburg	Finland, Mika Willberg	
1997	Trondheim	Finland, Petteri Vilanen	
1996	Stockholm	Finland, Vesa Martinene	
1995	Helsinki	Norway, Are Strøm	
1994	Copenhagen	Sweden, Fredrik Samuelsson	
1993	Gothenburg	Finland Niklas Sandström	
1992	Trondheim	Finland, Tommi Riijärvi	
1991	Stockholm	Norway, Snorre Eide	
1988	Gothenburg	Finland, Sami Niemelä	
1987	Trondheim	Finland, Petri Pennanen	





FRONTLINE



Wilh. Wilhelmsen

For more information, please visit www.wilhelmsen.com

SCHEDULE

We hope this years' program will contain something interesting for all participants.

	Monday	Tuesday	Wednesday	Thursday	Friday
Hour	Oslo	Oslo	Oslo/Trondheim	Trondheim	Trondheim
08:00			08:30 Transport Oslo - Tønsberg	Transport Trondheim - Verdal	
09:00					
10:00		Presentation of DnV, classification society. Guided tour followed by lunch.	Presentation of Grenland Offshore. Guided tour and lunch.	Presentation of Aker Verdal. Guided tour and lunch.	Guided tour of GUNERUS, NTNU's research vessel
11:00					
12:00					
13:00		13:30 Transport	Transport to Trondheim with dinner at a randomly picked Truck stop, enjoy.	13:30 Transport Verdal - Rotvoll, Trondheim	Senior lunch 12:30 Stig Berge, Institute Manager, presents IMT. Guided tour of Marintek
14:00					
15:00		Presentation of Wil. Wilhelmsen, shipping company and dinner.			Presentation of Statoil followed by dinner
16:00					
17:00				Transport Rotvoll - Samfundet	
18:00	NTHS starts, welcome!	Transport			
19:00					
20:00	Dinner time	Yet another awesome night on the town		Board Meeting / Relaxing at Samfundet	Banquete at Prinsen Hotell
21:00					
22:00	Experiencing Oslo by night			Trondheim by night	
23:00					

MEALS

All meals should according to Norwegian academic tradition start with the song "Theodor":



Jeg elskede sjøen ifra jeg var ung
og svømmede om som en sei, faderiorei.
En dag da jeg badet min velskabte kropp
kun bagenden ragede op, faderiorei.
:/: Folk ropte:" der svømmer en alligator!"
SÅ VAR DET !! TIL THEODOR. :/:



Tuesday	
Presentation and Lunch	
Presentation and Dinner	
Wednesday	
Presentation and Lunch	
Thursday	
Presentation and Lunch	
Presentation and Dinner	
Friday	
Presentation and Lunch	

REPORT FROM THE CONGRESS

MONDAY

By Andreas Haugstad and Carl Olav Wickmann

The 60th NTHS participants met at Oslo youth hostel, where the congress was planned to start at 18:00. In a conference room in this hostel, all participants in the Norwegian delegation had prepared hectically for the grand opening of the anniversary congress for many hours. Everyone were of course very excited, and now the great plan for the Norwegian NTHS were about to be put into action.

After some minutes with introductions and initial socialization between the Finnish, Danish, Swedish and Norwegian delegations, an official start of the congress was marked by cutting President Ole Jørgen's red tie (bilde?). Another ribbon was unfortunately not available, but the audience's applause suggested a great acceptance for the substitute.

During the opening ceremony, all congress participants were given the official 60. NTHS T-shirt, the congress' program and some useful nametags which included easy-to-forget details as "important departure times" and accommodation addresses in Oslo and Trondheim.

After ironing and sewing on our NTHS emblems for dear life as last minute preparations we got on the double-decker bus, destined for "Lanternen" restaurant located in one of Oslo's more fashionable districts, Bygdøy. A cheerful bunch eager to get the week started and quite hungry after the introductions at Haraldsheim youth hostel. "Lanternen" or the lantern, was expecting us and we were served a maritime dish of Norwegian salmon with both fried and cocked potatoes. The Finnish delegation grew in numbers during the meal as the last four members arrived after a minor detour to "Oslo International Airport, Sandefjord". The dinner ended with a sweet dessert of crème broule and of course, additional wine.

On a full stomach we were ready for Oslo's nightlife. We jumped back on the bus and drove downtown. The targeted place for the night was Café Kaos (chaos), a suitable name for such an occasion. The delegations spent the first night out to get acquainted and experiencing the indigenous way of having a great time.



INITIAL PRESENTATION BY THE 60TH NTHS PRESIDENT

TUESDAY

By Christian Fjell and Magnus Jordahl

We got up early in the morning to head out to DNV's headquarters at Høvik. The mood of the NTHS participants this early morning was influenced by the late night activities from the day before. In the good spirit of NTHS; the Finns pulled out their repertoire of Finnish drinking/pop songs, and got the mood and spirit uplifted again. Due to this it was a cheerful gang that crawled out of the bus in the beautiful scenery at Veritasveien 1 at the HQ of DNV. In the reception we were greeted by Karl Wiklund . He held a presentation of DNV, its core business, and its role in the industry in general. After this he held a very interesting presentation of the role of Nordic and Scandinavians in the world of shipping today, with special emphasis on the development of all the different ship types. This was very informative and a fitting subject for the NTHS delegates, since we are the ones who has the role to pass this legacy on.



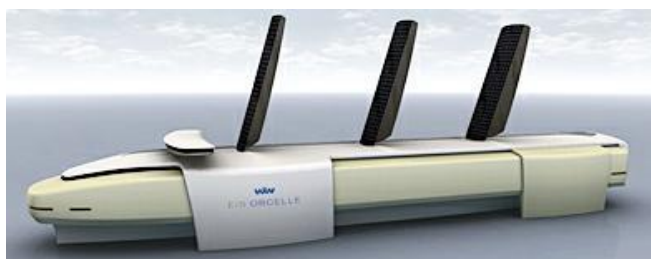
DNV HQ AT HØVIK

At the end of the presentation, lunch was served, where Wiklund announced that we would all receive a gift. He then pulled out a box containing a 2GB Ipod Nano Mp3 player, and to our amazement everybody received one!!



GIFT FROM DNV

Very satisfied by the good presentations, the delicious lunch, and the newly received gadget, we all took the bus to Lysaker to Wilh. Wilhelmsen's offices. Here the first speaker was Morten Wilhelm Wilhelmsen himself, who talked to us about the long and interesting history of WW. We were all amazed that the shipowner himself took time to hold this presentation for us, and it shows how much our visit meant to them. After this, Per Brinchman held a very good lecture on the future challenges for the naval architects of today and tomorrow. In brief he actually described a concept study of a futuristic pentamaran RO-RO vessel with no need of bunkers or ballast water. It would mainly run on wind, fuel cells, wave energy and solar power.



"E/S ORCELLE" ZERO EMISSION SHIP PRESENTED AT WILHELMSEN

The presentations at WW were ended with an amusing lecture by Marianne H Wang on the history of Linie Aquavit and its relationship with WW. Regular Aquavit usually crosses the Equator two times, but before dinner was served we were all granted to taste a very special Aquavit that actually had crossed the Equator 8 times with one of WW's vessels! This is an Aquavit which is not sold commercially, so this experience will stay in the memories for all of us Aquavit-loving Naval Architects for years and years to come. Even the Danes and the Swedes admitted that it was better than their native brands. The Finns; not accustomed to the distinctive flavor of Aquavit on the other hand, did not seem to appreciate it as much as their Scandinavian brethren. They will surely learn to love it eventually.

The dinner that was served was an extraordinary Tapas buffet, served in the beautiful environment of the WW offices. It is worth mentioning that we were served as much "normal-one-equator-crossing-Linie-Aquavit" as we wanted. And this definitely set the mood for the rest of the evening.



THE AQUAVIT MADE AVAILABLE FOR TASTE ON BEHALF OF WILH. WILHELMSEN

For Tuesday evening we obviously had to go somewhere keeping a maritime look to itself, and went to Scuba bar. There we practically had the whole 1st floor to ourselves, and it seemed that everybody had a good time until closing hour.



THE FINNISH DELEGATION HAVING AN EXQUISIT DINNER AT WILHELSEN HQ



THE NTHS PARTICIPANTS ENJOYING THEMSELVES AT SCUBA BAR



THE 60TH NTHS PARTICIPANTS AT THE DNV HEAD QUARTERS

WEDNESDAY

By Per Erlend Voie and Christian Skjelbred

Wednesday morning the delegations were up at eight and in the bus by eight thirty. Our double-decker bus had some engine problems, so the trip to Grenland Group in Tønsberg was made in a single-decker bus. This made it impossible to put any good distance between your sleepy self and the singing Finnes. Tønsberg was bathing in sunlight, and it was a wonderful day for an excursion. At Grenland Group we were met by Runar Rugtvedt, who gave us an overview of the company's international business areas. We were told that Grenland Group never sleeps, which is quite similar to the average NTHS participant. After the presentation most of us were given hardhats (not the Danes who of course wore their own..), and we were given a tour in the yard. Grenland Group is currently constructing large subsea modules for installation at the Troll Field. We were shown one of these modules, which were approaching its completion date. The other delegations, which mainly focus on shipbuilding, were impressed by the size of the module, weighing approx 1300 tons. The module's main task is to separate sand and water from the crude oil.



THE FIRST FULL SCALE UNDERWATER SEPARATION MODULE UNDER CONSTRUCTION AT GRENLAND GROUP

After finishing the tour of the yard, Grenland Group provided a very satisfying lunch for the congress. Everybody was happy, full of energy, and wearing napkins as bunny-ears.

From Tønsberg we headed for Oslo, to change back to our beloved double-decker. At Oslo Central station a representative from Fearnleys met us with a gift to Mannhullet. The gift was a maritime bandoleer, which was meant to be a part of the uniform of Mannhullets President.



CHAIRMAN OJ SHOWING THE REPRESENTATIVE TRANSPORTATION EQUIPMENT



FROM THE BUS TRIP TO TRONDHEIM



NORWEGIANS READY FOR A TOUR AT THE GRENLAND GROUP YARD

At the start of the bustrip to Trondheim, some were tired and wanted to rest a bit, and some had been looting the beer-storage. After about an hour, most of the delegates understood that this was not a bus meant for resting. Especially in the back of the top deck, the mood was exponentially rising. The Norwegians envied the Finns for their songs, but after some kilometres there were Finns and Norwegians battling with folk-music. About halfway to Trondheim it was time for dinner. Per Erlend ate nine desserts, while Artur tried to steal the Esso-flag without success due to a bus driver with eyes in the back of his head (or side mirrors on the bus).

Back on the road again the Norwegians, accompanied by a Swedish/Brazilian participant, started singing "One hundred bottles of beer". At the end, the whole bus was singing, and the song was finished with a laughing cheer from everyone. Maybe except the bus driver. When the bus was approaching Trondheim, there was an anxious mood spreading throughout the bus. The beer-storage was at its minimum. We arrived at Trondheim Youth Hostel at about twelve at night, the luggage was dropped at the entrance, and we headed for Down Town. The mood was incredible, regarding the long bus trip. Happy faces everywhere, beer, cocktails, unbelievable stories and Finnish waist bags. Even though it was a Wednesday, many students from Marine Technology in Trondheim joined the party at Downtown.



A FINN RECHARGING HIS BATTERIES WHILE ENJOYING THE BEAUTIFUL TØNSBERG SUN

THURSDAY

By Torkel Ugland and Anders Lofterød

Thursday, as all other mornings started early. With planned visits to Aker Verdal and Statoil, the participants had a lot to see forward to. The bus ride to Verdal was used to sleep for most of the travellers. Unfortunately the guide also slept. As the bus went past Aker Verdal some of the Fins were wondering if they were producing cranes in Norway. When the guide awoke the bus was in Steinskjer, and had to turn around, to big laughs from everyone. Finally in Verdal, the company was presented by Erik Stiklestad. It was interesting to hear about the projects that were underway. After a lunch, it was time for a guided tour around the site. To our luck Aker Verdal had a semi submersible that were due to delivery a few weeks later. That meant that the construction was almost finished. The dimensions were truly impressive, and it was great to show our Nordic colleagues something that is “typical” Norwegian.



NTHS AT AKER VERDAL



PARTICIPANT EAGERLY STUDYING THE SCALE OF THE SEMI-SUBMERISBLE HULL

Back in Trondheim, Statoil was ready for a presentation at “Marin Teknisk Senter”. As there were an earlier participant at NTHS that was holding the presentation, the auditorium was filled with beer to everyone’s joy. Some of the participants were also wondering for the possibilities for working in Statoil afterwards, so the presentation was a great success.

Even though the delegation had been to two presentations this day, there seemed no indication of slowing down. Though, this was unfortunately not an option for the participants. The naval student band Hasselhoffs was booked for the evening to play at Klubbben, Samfundet. Here was also all the naval architect students invited and the day turned fast from good to GREAT. It often does when you combine 300 Nordic students, some beer, the Hasselhoffs and a long list of the best rock classics. The Hasselhoffs were famous among all the naval architect students in Trondheim, a fame that have spread further to the Nordic students.



GOOD MOOD AT THE NTHS CONCERT IN SAMFUNDET

FRIDAY

By Solveig Pettersen and May Britt Kristensen

A bit tired after the night before all the participants meet outside Trondheim youth hostel at 10 am. The tiredness soon disappeared when the participants found out that they were going to visit the new research vessel of NTNU, "Gunnerus".



NTNU'S RESEARCH VESSEL "GUNNERUS"



A QUICK "CHAMPAGNE BREAK" BEFORE THE GALLA LATER AT FRIDAY

The captain of Gunnerus, and the rest of the crew did a great job showing the participants around the ship and answering all their questions. The participants were all very impressed and they could not stop talking about the research vessel the rest of the day. With lots of pictures of Gunnerus to bring with them home to their own universities, they all got in the bus and drove up to Marin Teknisk Senter, MTS.

Safely up at MTS, the Norwegian students headquarters, the delegates were showed into T2, the main auditorium at MTS. Here Professor Sverre Steen and Professor Stig Berge had a short and interesting presentation about MARINTEK and IMT, the institute of marine technology. As it was already well past lunch times, the delegates happily received a sponsored lunch by MARINTEK after the presentation.

After lunch they went on a tour of the towing tank, the ocean lab and the "cavitation tunnel". Once again the participants could not believe their own eyes and were very impressed with the big research and educational facilities at school, NTNU.

Everybody was, if possible, even happier when they found out that the champagne was waiting outside, and in the true spirit of NTHS the champagne was opened with a real sable!!!

After the champagne was empty the delegates were transported down to Trondheim youth hostel where they all got to rest for a little bit before they put on their finest banquette clothing. At 6.30 pm they were all present in the bus and ready for a "grand galla" night.

When they arrived at Prinsen hotel, downtown Trondheim, they were greeted with a glass of sparkling wine and a string quartet. The music was beautiful but after a week of travelling with mostly boys the participants were mostly impressed with the dinner partners for the evening.

The dinner started of with a fish and shellfish symphony. Afterwards there was served chateaubriand and the dessert was vanilla ice cream with berries and sabayonne sauce. The whole meal was absolutely fabulous and with lots of good speeches, songs and entertainment during the meal the time flew by. When it got closer to 11 pm the transportation was already waiting outside and we all travelled up to MTS to have a splendid after party and a grand finale to NTHS 2007.



THE FINNISH DELEGATION GIVING A TOAST



A GREAT SPEECH FOR THE GENTLEMEN IS GIVEN BY SOLVEIG



JOHAN VEDELER DONATES AN ANCHOR TO THE PRESIDENT

THE NORWEGIAN DELEGATION

During this year's NTHS, the Norwegian delegation will consist of 12 members:

Ole Jørgen Aarvik

60th NTHS President

Was born in 1982, the year when Oddvar Brå, the famous Norwegian skier, broke his ski pole. He is currently studying at the department of marine systems, and will take aim for drill or vessel management. It's his second year of NTHS, and he is a very active student within social activities.

Responsible for the irresponsibility.



Anders Lofterød

60th NTHS Coordinator

He was born 26 years ago in a small place called Son situated only 40 minutes outside Oslo. The year of 2007 will be the year that Anders finishes his master thesis in hydrodynamics and starts working. He thinks the participation in NTHS gives a great opportunity to acquire insight in the maritime industry, get hands – on experience, build network and to have some goooood fun.



Andreas Eios

60th NTHS Secretary

Andreas is studying in his third year at IMT, constructions and hydrodynamics. He is chairman of the Sailing yacht committee, running Steinbiten III, and dreams of sailing around the world on cold winter days in Trondheim. Other highly appreciated activities are Telemark skiing and social events with Mannhullet. NTHS first timer.



Carl Olav Wickmann

60th NTHS Treasurer

Carl Olav is working on his master thesis this semester, and will be finishing his studies this summer. He has specialized in offshore and hydrodynamics, and enjoys sailing on his spare time. The previous time he participated in NTHS, the congress was hosted by the Finnish delegation in 2005. Has a weakness for cognacs.



Christian Fjell

60th NTHS Coordinator

Christian is graduating this may from the department of marine systems. After graduation he will start working for DNV's shipping consultant department, allowing him to pursue his passion for ship management, market strategy and spice it up with a little technical know-how. With the memories of NTHS Finland 2005 still fresh, he can't wait to commence this year's Congress and create new memories, get new friends, and maybe even learn something more about the industry that we have learned to love!



Christian B. Skjelbred

Mannhullet President

Christian joined this world almost 24 years ago and grew up in Sandefjord. He is currently in his 3rd year of studying marine technology, allegedly focusing on constructions and hydrodynamics. He is about to finish his reign as president of the student association Mannhullet. As a first timer at NTHS he is looking forward to have some first class, top notch, maritime fun!



Jørgen Øvrevik

60th NTHS Webmaster

Jørgen is currently suffering through his third year at MTS. He absolutely hates web design, but quote:

"Its a dirty job, but someone has to do it"

"as long as I don't have to go outside..."

"I get fits when I leave a wireless internet area"

"talk nerdy to me"

"keep I.T. real"

He has a background as an IT consultant, but got fed up with "stupid friggin' computers" and started on marine engineering instead. Despite his relentless complaining, he is actually having a great time, and is looking forward to the congress with great expectations.



Color Line Marine AS

Magnus Jordahl

60th NTHS Coordinator

Born in Kristiansund in 1982, he was bound to be a marine engineer with a shipyard nearby, supply vessels and semi-submersibles going by his windows all the time. When a little older, he moved to Knarvik outside Bergen with his family.

He is studying maintenance technology at the department of marine systems, and sees ship management as an interesting choice of career. Likes karate, snowboarding, golf, photographing, and cognac.



May Britt Kristensen

60th NTHS Banquet coordinator

May Britt is also on her third year, specializing in constructions and hydrodynamics. She is the leader of the marine technology recruiting group that encourages high school students to start a bright future by studying marine technology. She loves to travel and spends her vacations working as a volunteer, so far she has worked in Tanzania and Guatemala. Also a NTHS first timer and is looking forward to the congress.



Per Erlend Voie

60th NTHS Coordinator and Mannhullet Treasurer

Per Erlend is studying structures and hydrodynamics in his third year at IMT. He is chairman and chief of economics in the student union Mannhullet. The summer 2007 he is skiing across the Greenland icecap and other highly appreciated activities are cross-country and telemark skiing and hunting. This is first time he attends NTHS.



Solveig Pettersen

60th NTHS Coordinator

Solveig was born in the Lofoten Islands 21 years ago. She is finishing her third year at IMT, studying Marine System Design at the Department of Marine Systems. Solveig look forward to learn more about the naval industry and to become acquainted with fellow students from the Nordic countries. She is attending NTHS for the first time.



Torkel Ugland

60th NTHS Coordinator

Torkel Ugland, age 23, comes from just outside Trondheim. He is currently studying his 4th year at the Institute of Marine Technology with emphasis on Operation Technology. By working with a lot of student-social activities (including NTHS), he tries the best to create bonds between the students with different grades, genders and interests. Naturally, he is the coach for a female basketballteam at NTNUI. Since he now is a part of the Norwegian "NTHS-team", he sees this as an excellent opportunity to create further bonds between Nordic students.





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Fred. Olsen Production

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PRESENTATION OF OUR DEPARTMENT OF MARINE TECHNOLOGY

The Department of Marine Technology is part of The Norwegian University of Science and Technology (NTNU) faculty of Engineering Science and Technology. The Department is divided in two groups: Marine Structures and Marine Systems. In addition the Department has national responsibility for the Master studies in nautical science.

In addition the department has national responsibility for the master studies in nautical science.

MARINE STRUCTURES

This Marine structures group in general embraces the fields of marine structures as well as marine hydrodynamics and control systems. The emphasis is that the student will learn the ability to combine physical understanding with the use of mathematical models and computer based analytical methods. There are three fields of specialization within this group.

1) MARINE STRUCTURES

Marine Structures covers different methods of response analysis. The department's branches include different kinds of ships, oil drilling platforms and pipelines.

The main activities at the study branch of Marine Structures are:

- Capacity analysis of steel, aluminum, and composite structures
- Response analysis of marine structures
- Reliability and risk analysis
- Fatigue and fracture mechanics
- Fracture limit analysis

For research and education purposes the department uses advanced laboratories, Marine Structures Laboratories. The Laboratory cooperates with and is used by SINTEF Structure & Concrete.



2) MARINE HYDRODYNAMICS

The main activities are:

- Wave induced motions and response on marine structures.
- Vortex shedding around marine structures & Viscous damping
- Sea keeping and response on high speed vessels
- Hydro elasticity
- Slamming
- Breaking waves & Wave Dynamics
- Stochastic analyses of waves and wave induced response variables
- Resistance on ships.
- Thrusters and water jets.



This branch of study cooperates closely with the branch of Marine Structures and MARINTEK.

3) CONTROL SYSTEMS

The demand for efficiency and safety requires high precision in marine operations. Automatic control of thruster systems (dynamic positioning of vessels) is required to limit the motions of ships or platforms and thereby displacements and stresses in risers during drilling operations, or in pipelines during laying, and to ensure precise lifting, installation and intervention operations. Automatic control is crucial for meeting the future requirements for high performance and for satisfying the need to operate under demanding environmental conditions. This requires a close integration with hydrodynamics and structural dynamics.

MARINE SYSTEMS

The group focuses on developing the big picture in technical issues related to design, analysis and operation of marine systems. The common denominator is that the student utilizes knowledge from several educational disciplines to find solutions. There are 3 branches within this department of which the student can get into further specialization.

1) MARINE BUILDING TECHNIQUES AND COMPUTER TECHNOLOGY (DESIGN OF MARINE SYSTEMS)

Marine design is the field where one can develop complex systems that accommodates user specifications. Marine design is differentiated into three different areas of use.

Design of ship and platforms

Design of fishing vessels and sea farms

Design of subsea systems

By specializing within this field, the student will acquire knowledge about how:

- the building of ships, platforms and rigs are planned and executed
- modern information technology can be used to improve efficiency in these processes, hence strengthening the company's competitiveness

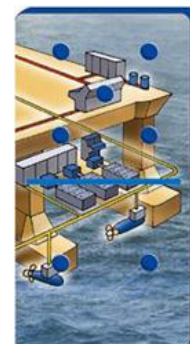
Important fields of study within this branch are project management, quality control, construction methods, CAD, and welding techniques.



2) MARINE MACHINERY (MARINE ENGINEERING)

Keynotes:

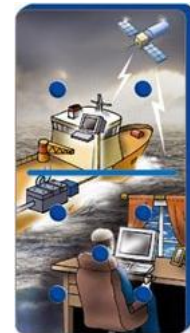
- Production of electrical and mechanical power at sea
- Combustion engines
- Control of machinery systems
- Measurement of mechanical and thermal properties
- Fluid and heat transport
- Mechanical oscillations



The student will learn how this knowledge can be used to design complete machinery systems for both ships and oil platforms. He/she also learns to simulate these systems mathematically.

3) TECHNICAL OPERATION OF MARINE SYSTEMS

Modern ship and offshore production facilities for oil and gas are capital intensive and have high requirements for safety, environment and efficiency. The ability to run such units in an optimal matter is therefore of great importance. This branch of study will give the students basic insight in operation analysis for marine systems. It gives knowledge of the elements that affect efficiency, safety, environment, cost, and how one takes these into account in different stages of the life span of a technical system. Further on, the student receives basic knowledge about strategies, systems, and control requirements of these elements.



FISHERY AND SEA FARMING

Key words: Design methods, operation and maintenance management, sea farming facilities, fleet management transport chains, logistics management, stability and buoyancy.



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60 YEARS OF TRADITION WITH NTHS – FROM THE ARCHIVE

FLASHBACKS FROM THE 40TH NTHS

The year was 1987. Mannhullet and Norway hosted the 40th NTHS. The delegations visited the four largest cities in Norway, namely Stavanger, Bergen, Oslo and Trondheim.

The delegates met at Stavanger railway station. The official opening of the congress was held by the Norwegian president, Jan C. Berg, whom held a speech and cut the ribbon parting the visiting delegates from the special made Norwegian fortifying tonic. Elf, a world leader in sub sea technology was the first company to visit. When the Elf-visit was over the delegates enjoyed sightseeing in Stavanger. They got a view of many of Norway's most modern semi-submersibles at Hinnavågen, and there was not a dry Swedish eye in the bus when they saw a GVA 4000-platform.

The next stop was at Rosenberg Verft at Buøy. The delegates got a tour of the Gullfaks-B platform, which for most of the delegates was the first visit on board a platform. Back down on mother earth they traveled back to Stavanger and the congress' base for the night; the training ship M/S Gann. Time for fraternization. At "Det Røde Sjøhus" in Stavanger the delegates were served shrimps and white wine. It was here the congress got its subtitle; The Great Norwegian Shrimpcongress. They had shrimps for the third time this day. And as always, most NTHS-relics belonging to the host (the flag and the club) were "expedited" by the foreign visitors.

Tuesday started with a violent catamaran-trip to Stord where they visited Aker-Stord, before they traveled by yet another catamaran to Bergen. The history books tell of a somewhat calmer night in Bergen, than the preceding night in Stavanger. On Wednesday morning the tour went to the Chr. Michelsen Institute, and was lectured by Hugh Allen, whom proudly showed them a picture of Bergen, taken on one of Bergen's two yearly days with fine weather. At Sotra outside Bergen the delegates were shown two different sorts of wave-based power plants. Many students were soaked by the waves due to their own curiosity. Back in Bergen it was time for the traditional lectures from the delegations, and of course "The Great Finish Bar". The hosts lectured about "Safety offshore", while the Finns had a somewhat vague contribution about special aspects of Finnish ships.

The congress moved to Oslo, and the partying had made its mark on the traveling parties. They all had well deserved baths at Nadderudbadet before the set sail towards Det Norske Veritas. DNV had, together with Rederiforbundet, a rich program planned for the day. At this point the NTHS-congress had regained its original name, after the Swedes, Danes and Finns, earlier on, while visiting the west of Norway, had renamed it NTHO (Nordic Technical Universities' Offshore-congress).

After a long train trip, the congress arrived in "Den Gamle Stad", Trondheim. The congress visited Marin Teknisk Senter and the center for Maritime Education, before it was time for the banquet. The banquet was held at restaurant Bryggen, which was considered one of Norway's finest restaurants. The Danes gave their NTHS-gift to the Norwegian delegation when the banquet was finished. This was a device for holding drinking contests for up to 10 persons and even included an anti-cheating-mechanism. This advice was obviously tested, and the Swedes from KTH won the contest. The party ended at sunrise. A success!

FLASHBACKS FROM THE 30TH NTHS

This year's conference was pre started by the Finnish who arrived full of expectations a whole day before. The arranging committee kick started then the conference and felt it was better to begin the fraternisation on one of the local pubs in the area. The day ended late, but the participants managed to get up at seven to meet the two Swedish and Danish delegations waiting at the train station and ferry quay.

The first presentation of the week was at the brand new DNV centre at Høvikodden, where they all were greeted welcome by the staff and a cold beer.

The second visit of the day went to the admirable offices of Rederiforbundet where the participants were welcomed royally with good presentations and a high quality dinner.

Tuesday morning the delegations headed further to "Aker gruppen" (*today: Aker Kværner*). Here they received a quick presentation of the turbines, which they made in co-operation with General Electric, and got a quick glance at the production site.

The delegation went further that day to Moss and the Moss-Rosenberg Shipyard where they were allowed to inspect the revolutionizing LNG- and LPG vessels (*Moss Type*). The lunch was eaten at Refsnes in co-operation with the yard.

Wednesday, the delegations were introduced at Nylands Shipyard in Oslo (then also a part of *Akergruppen*). Here were the participants able to go the construction site and see the current offshore platforms that were built. The delegation headed thereafter with plane to Trondheim. A control check of the number of participants was quickly determined after "take off" with the number of 47 "service lamps" calling. Too bad the plane only had 25 beer cans on board.

The only technical presentations on Thursday were the participants themselves that held. Each country had prepared a presentation of different ship design concepts. The concepts were later that day discussed over a beer at E.C Dahls before they went further to the Studenterhytta.

A visit to the towing tank is a must when you are a naval engineer and visit Trondheim. The participants of NTHS were no exception, and got the opportunity to watch a full scale experiment in the tank. Some used the rest of the day to sleep, while others decided to warm up to the banquet. The final night started together with some professors from the University and ended with an after party at Strossa (*Samfundet*). Though, the final closing of the conference was made the subsequent breakfast at Britannia Hotel right after Strossa. Here were the two final toasts made: The first one saluting the 30 year history of the conference, followed closely by a toast for the next 30!

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C-MAP Norway, the world's major supplier of electronic charts offering the largest coverage of official ENC, has for some time been a major sponsor for the Norwegian Society for Sea Rescue. By supporting electronic charts for the entire fleet, C-MAP Norway not only contributes to increase safety at sea, but also gets useful feedback from the navigators that allow us to improve and develop the C-MAP service.

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download updates directly over the high speed Internet connection. Having access to the latest updated charts is a necessity for offering a safe service and it is really something that the rescue team recognize as a valuable asset."

*Skipper Robert Jakobsen
NSSR Norway*

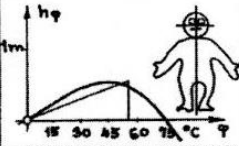
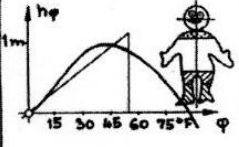
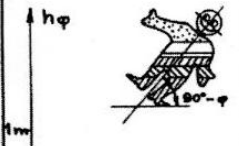
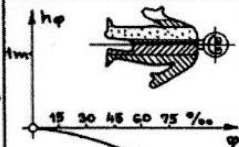


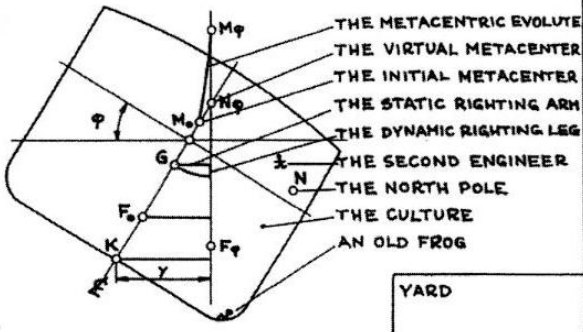
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FROM NTHS-1961

STABILITY PLAN					
NAME OF SHIP: 5/3 HOMO PRIMITIVUS NAVALIS CONSTRUCTOR					
CONDITION OF LOAD	CURVE OF RIGHTING ARMS	\bar{K} KG	CARGO SPECIFICATION	HEIGHT ABOVE BASE LINE	ADDITIONAL NOTES
LIGHT CONDITION		1.32	JUST NOTHING AT ALL		THIS CONDITION IS NOT RECOMMENDED.
DOUBLE BOTTOM TANKS FILLED PEAKS FILLED	 CALCULATED ACCORDING TO LAVENDEL-JÖNS	1.03	COCTAIL MARTINI DRY & SWEET SOME DRY CARGO BEER IN BARRELS SCHNAPS IN PEAKS VIN ROUGE SAINT ÉMILION VEAUNOISLETTE (THE DEAD COW)	1.7 0.3 1.0 2.0 1.5 0.4	AS VODKA IS NOT CARRIED THE MORSKOJ REGISTER RULES AND REGULATIONS CONCERNING DYNAMICAL STABILITY NEED NOT BE CONSIDERED.
SHIP LOADED TO TROPIC SUMMER F.W. LOAD LINE	 180°-φ	1.56	PIECES OF FRUIT IN AQUA VANDA CAFÉ NOIR IN COFFERDAMS COGNAC MAYKOFF/LIQUEUR COINTREAU IN COAL BOX EAU DE VICHY IN SANITY TANK	0.6 0.7 1.3 0.7	THIS IS THE MAXIMUM ANGLE OF INCLINATION WITHOUT EXPOSING HOLES ⁹ IN DECK. CERTIFICATE OF SEAWORTHINESS SHOULD BE WITHDRAWN. ⁹ THE ALCOHOL IS THE SECOND BEST
SHIP COMPLETELY SUBMERGED		2.00	ADDITIONAL LIQUID CARGO ON PRIVATE INITIATIVE	2.5	THIS CONDITION IS RECOMMENDED AS THE ^L WAVE MAKING RESISTANCE IS MINIMIZED AND CORRECTIONS FOR FREE SURFACES NEED NOT BE CONSIDERED.

	ADDITIONAL CONDITIONS														
	LAUNCHING CONDITION: NAKED AND TOOTHLESS														
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THE UNITED FENNOSCANDIAN STUDENTS SOCIETY OF NAVAL ARCHITECTS AND MARINE ENGINEERS LRX-SBK-HELSINGFORS	YARD	NTHS-61
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PRESENTATION OF MANNHULLET

All students, including the international students, at the Institute of Marine Technology (IMT) are members of the student union. To this date we count about 400 active members in total. Besides The Board, Mannhullet has eleven subgroups which activities span from choir and theatre to sailing, motorboat and hiking/trekking and of course NTHS.

Twice a year trips to some of Norway's greatest mountain areas are made, and the sailboat and motorboat are in frequent use during the spring and autumn. In summer the sailboat Steinbitten 3, is lent out to the students who uses it to visit the beautiful southern coast of Norway and years ago some students sailed to The Bahamas in the older Steinbitten 1 and 2. Our own student paper, Marina, holds a variety of articles, mostly with humoristic content and has a bad habit of spreading rumours about unlucky students. At winter we gather for our traditional Skiregatta in the nearby Bymarka and have a great time with ski jumping, beer relay and a party at the Student Cabin in scenic surroundings. In addition to all of these social activities are the weekly presentations of companies followed by beer and pizza with subsequent job interviews for the senior students the following day.

The student union is based on voluntary work and it requires a lot of initiative and enthusiasm from the people involved to create a great social and educational environment for the students at IMT.



CONCLUDING WORDS

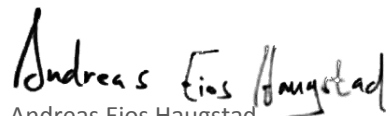
The 60th NTHS Congress has been a great success and the next year's Norwegian delegates are already looking forward to the 61st, taking place in Denmark. We would like to thank the visiting delegations for their high spirited participation in this year's congress. We also thank our contributors for their part, in making the congress of 2007 memorable.

We hope that the companies, supporting this year's congress, will benefit from the cooperation and continue working with us in the year to come.

As we pass on the task of hosting the NTHS of 2008 to Nul-Kryds, we are passing on a proud, 60 year old tradition. We know that hosting NTHS is a lot of work, but also very rewarding. We hope the Danish delegates of 2008 will have fun preparing for the 61st congress and look forward to visit Denmark the next spring.

We are looking forward to the 61st NTHS.

Regards


Andreas Eios Haugstad

NTHS Chairman of the Norwegian Delegation 2008

Det Norske Veritas gratulerer med 60-års jubileet og ønsker lykke til med årets kongress!



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