



# Waterways

Coasts, Oceans, Ports, and Rivers Institute of the American Society of Civil Engineers

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spring 2006

## Offshore Papers Honored at Gala Dinner ASCE OTC Hall of Fame

For over 35 years the Offshore Technology Conference (OTC) has brought together engineers, scientists and other professionals from the offshore industry. Since the first conference in 1969, more than 10,000



**ASCE**

papers have been presented at OTC. A few of these papers stand out

having provided the industry with innovation, direction and lasting impact on the design, construction or installation of the offshore infrastructure. Many of the OTC papers have straddled the divides to become an integral part of the design process of other categories of structures such as buildings and bridges.

Last year, the ASCE/COPRI OTC Program Development Committee decided to recognize outstanding civil engineering papers from the early years of OTC by creating the *ASCE OTC Hall of Fame*. Papers presented 30 or more years ago were nominated and voted on by civil engineering experts in the offshore industry. The nine papers selected for the inaugural year induction cover topics such as wave force evaluation; ultimate strength and reserve capacity; tubular joint material and design; pile foundations; and pipeline installation. These honored papers, still today, set the standard for current practices worldwide.

*continued on page 2*

## Navigation Engineering: Niche or Multidisciplinary Specialty?

### Task Committee Looking for Input

William McAnally, Jr., P.E.

To further the navigation engineering initiative, in 2005 the COPRI Waterways Committee created a Navigation Engineering Task Committee to define the specialty of navigation engineering; identify its practitioners, projects, literature, and resources; and recommend actions and provide products to improve the practice.

The importance of the U. S. marine transportation system cannot be overstated. Despite growth in communications and high speed transportation, the nation's ports and waterways remain the critical backbone of our economy and national defense.

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## COPRI Governing Board

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# President's Message

Billy Edge, Ph.D., P.E.



There are many interesting changes going on within COPRI that will benefit us all. First off I would like to welcome the Tidal Hydraulics Committee to COPRI. For many years we have asked ourselves why the Tidal Hydraulics Committee was in EWRI and prior to that in the Hydraulics Division instead of the more coastal side of ASCE. It seemed at the time that the mold was just too hard to break. But with the opportunities for synergism, the temptation was no longer resistible. I think the growth within COPRI, our prior leadership and our excellent staff provides opportunities for continued growth. If anyone would like to be involved with this committee, please contact the Chair, Andrew Kennedy at [kennedy@coastal.ufl.edu](mailto:kennedy@coastal.ufl.edu).

Secondly, COPRI is changing its Bylaws to better reflect how it operates. Although this should not have a significant change on individual members, it will help to strengthen our organizational framework. Since the initiation of COPRI and our first Bylaws, we have added committees, modified our relations within ASCE and made other important changes in the way we conduct our business. The proposed changes will be posted on the COPRI website this spring for your review before they are acted upon by first the COPRI Board of Governors and then the ASCE Board of Directors.

This year we are celebrating the seminal works presented at the early OTCs with a special banquet organized by COPRI during the conference. As a Ph.D. student in the late 60's I remember reading nearly all of the papers which have been selected to be honored at this banquet. I would like to acknowledge what the authors of these papers have contributed to my own career. Although I veered from the offshore focus, the motivation inspired by those early classics has carried me and many of my colleagues far into deep water and into our profession. ■

## Offshore Papers Honored continued from page 1

The authors of the papers, presented between 1969 and 1975, will be recognized with induction into the Hall of Fame at a special gala dinner on May 2, 2006, at the Petroleum Club in Houston. This event is held in conjunction with this year's OTC, May 1-4 at the Reliant Center in Houston. ASCE will continue to induct more papers into the Hall of Fame in the future.

A commemorative edition featuring the nine complete *Hall of Fame* papers will be published by ASCE in honor of this inaugural event. Never before have these influential papers been published together in one convenient volume. The book will be available at the Gala dinner and for sale by ASCE in May 2006.

To order tickets to this prestigious event honoring some of the most influential, pioneering engineers in the offshore industry, or for sponsoring opportunities, please contact Lesa Rair at 703-295-6370 or [lrair@asce.org](mailto:lrair@asce.org). Information can also be found on the COPRI website at [www.coprinstitute.org](http://www.coprinstitute.org). ■

Join your colleagues, friends, associates and clients to honor the authors of nine extraordinary papers presented in the early years of OTC.

### ASCE OTC Hall of Fame Gala Dinner

May 2, 2006

Petroleum Club

800 Bell St., 43rd Floor, Houston, Texas.

To order tickets to this event please call 703-295-6370 or visit [www.coprinstitute.org/news/halloffame.cfm](http://www.coprinstitute.org/news/halloffame.cfm)

## What's New with our Journal

*The Journal of Waterway, Port, Coastal and Ocean Engineering* is continually evolving. In October 2005 Vijay Panchang took over as the editor, committing to maintain the preeminent status and integrity of the publication. Currently, Panchang and the rest of the assistant editors are working with ASCE staff to establish a system for electronic submission and manuscript processing. They are also looking to further expand the editorial board; anyone interested in nominating someone can contact [panchanv@tamug.tamu.edu](mailto:panchanv@tamug.tamu.edu) for more information. The journal is also expanding into special editions including tsunamis and soil liquefaction.

To order your subscription to the bi-monthly Journal of Waterway, Port, Coastal and Ocean Engineering please visit [www.coprinstitute.org/pubs/journals.cfm](http://www.coprinstitute.org/pubs/journals.cfm) ■

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## Tetra Tech, Inc. Signs-up as First Sustaining Organizational Member

COPRI would like to welcome Tetra Tech, Inc. as our first Sustaining Organizational Member, the highest level of COPRI organizational membership. Tetra Tech, Inc. has been a Supporting Organizational Member since 2004. We would like to offer a special thanks to all of our organizational members for their continued support! For information on how to sign up your company please visit [www.coprinstitute.org](http://www.coprinstitute.org)

Tetra Tech ([www.tetrattech.com](http://www.tetrattech.com)) was founded in 1966 as a water science and engineering company. Throughout the 1960's, Tetra Tech primarily focused on ocean wave science, particularly tsunamis, and then branched into coastal engineering. Throughout the 1970's and 1980's, Tetra Tech was a leader in sediment transport, coastal erosion, and coastal infrastructure design, which helped the company expand into the areas it serves today: resource management, infrastructure, communications, and security. The company has been ranked as the leading water company in the United States for the last three years by Engineering News Record Magazine.

To meet the challenges of expansion and the generation of ports, harbors, and waterways, Tetra Tech has forged a skill set to provide comprehensive technical and regulatory expertise for port and harbor improvement projects and coastal and river development. The company has extensive experience working in marine, estuarine, riverine, and wetland environments on all three coasts, the Great Lakes, and inland river systems of the United States, as well as on several other continents. Tetra Tech offers unequalled excellence in project planning, engineering, design, regulatory compliance, permitting, and project construction. ■

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## KNOW SOMEONE not receiving *Waterways*?

Do you know someone who is not receiving their quarterly issue of *Waterways*? If so, please send an email to [copri@asce.org](mailto:copri@asce.org) with the member's mailing and email address. Feel free to invite them to visit [www.asce.org/myprofile](http://www.asce.org/myprofile) (or call 800-548-2723) to verify and/or update their contact information today! Past versions of *Waterways* are available online in the COPRI news section at

<http://www.coprinstitute.org/news/newsarchives.cfm>.

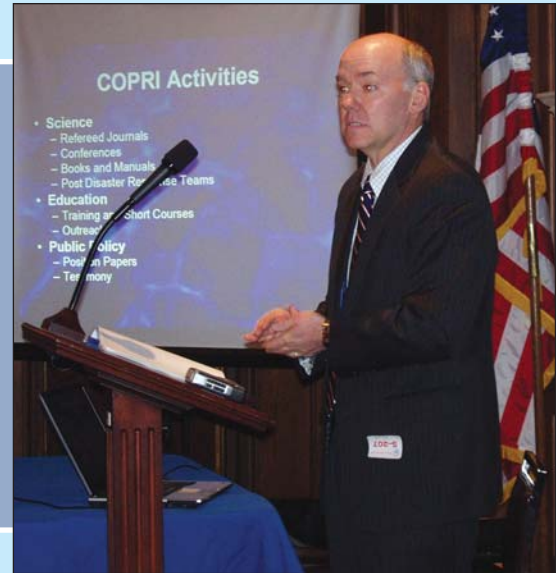
Please help us help you to receive all your membership benefits by keeping your contact information current.

## Coastal Professionals Hit Capitol Hill

On March 1-3, 2006, the American Shore and Beach Preservation Association (ASBPA) held its annual Coastal Summit in Washington DC, bringing together individuals and groups concerned with the conditions of our country's coastlines including engineers, scientists, public officials and members of Congress. The theme of the 2006 Summit was "Investing in America's Coast". The Summit covered a wide-range of topics affecting the nation's coasts such as beach replenishment funding, coastal hazards, coastal economics, grassroots activism, ocean policy and disaster mitigation.

Many COPRI members from across the country were in attendance for the three day event, which encouraged delegates to petition members of congress on pressing coastal issues including funding for beach restoration projects and studies, passing a Water Resources Development Act (WRDA), increasing funding for FEMA's pre-disaster mitigation program, and encouraging the development of an integrated ocean observing system. Participants were also exposed to various speakers from such groups as the Federal Emergency Management Association (FEMA), the U.S. Army Corps of Engineers (USACE), the Academy of Natural Sciences, Taxpayers for Common Sense and COPRI.

COPRI board member John Headland, P.E. was part of a panel entitled "Congressional Hazards Caucus Alliance: Linking Science, Education and Public Policy". The panel focused on what outside organizations can do to enhance the use of science in public policy decision-making and why it is so important in the post-Katrina environment. Headland spoke to



COPRI board member John Headland, P.E.

the crowd about COPRI's coastal activities, as well as where we are heading in the future and how engineers and other outside specialists can play a role in the policy process. He touched on his own experiences investigating the aftermath of both the Asian Tsunami and Hurricane Katrina.

Brian Pallasch, ASCE Government Relations Director, participated in a panel entitled "Why WRDA is Needed (and Needed Now): Views from Other Members of the WRDA Coalition", where he shared the results of the ASCE Infrastructure Report Card and answered questions regarding the possibility of including more coastal issues on the report card in the future, as well as in ASCE's policy agenda.

During the summit COPRI members and staff met with members and staff of ASBPA to discuss how the two organizations can work together more effectively to bridge the gap between science and policy. The informal discussion focused on how the two organizations can improve the coordination of activities in order to make the most effective use of our available resources, while still maintaining our separate identities. A liaison between the two groups to keep both sides abreast of what is happening within the two organizations was one of the items that came out of the meeting. Michael Walther, P.E., a member of both COPRI and ASBPA will now participate in COPRI's Policy Committee and Charles Calhoun, P.E., COPRI Policy Committee chair, will be included on the ASBPA Policy Committee. More information on this meeting and future cooperation between the two organizations will be on the COPRI website ([www.coprinstitute.org](http://www.coprinstitute.org)) as it becomes available. ■



## Call For Papers

### **Coastal Sediments 2007 "Coastal Engineering and Science in Cascading Spatial and Temporal Scales"**

**May 13-17, 2007, New Orleans, LA**

**Deadline to Submit Papers is May 16, 2006**

**<http://www.asce.org/conferences/cs07/index.cfm>**



The Coastal Sediments technical specialty conferences provide an international forum for exchange of information among coastal engineers, geologists, marine scientists, shallow-water oceanographers, and others interested in the physical processes of coastal sediment transport and morphology change. Prospective authors are cordially invited to submit abstracts of papers dealing with the conference theme and related subjects. COPRI looks forward to hosting this conference in New Orleans. Thematic sessions pertaining to the recent events in the city are currently being developed. ■

### **Coastal Structures 2007**

**July 2-4, 2007, Venice, Italy**

**Deadline to Submit Papers is September 30, 2006**

**<http://www.cst07.corila.it/>**

COPRI would like to invite you to submit abstracts to our Coastal Structures Conference. This conference, the only comprehensive conference on coastal structures, highlights the significant advancements in coastal structure innovation, design and construction. Abstracts should be submitted via email to [cst07secretariat@corila.it](mailto:cst07secretariat@corila.it). Coastal Structures 2007 is held in conjunction with the IAHR 2007 conference, also in Venice. ■

### **ASBPA 2006 Fall Conference**

**October 9-11, 2006, Long Branch, New Jersey**

**Deadline to Submit Papers is May 15, 2006**

**<http://www.asbpa.org>**

As a co-sponsor of the conference, COPRI members are encouraged to submit presentations to this annual conference promoting the protection of beaches and shores. Presentations can be on any topic related to the ASBPA mission including: shoreline restoration design, marsh restoration design, coastal shoreline management issues, coastal water quality, coastal ocean and weather observation systems, effects of extreme storms and flood protection to name a few. One page summaries should be submitted to [Abstracts@asbpa.org](mailto:Abstracts@asbpa.org) ■

## Don't Forget to Register!

### **Offshore Technology Conference 2006 (OTC)**

**May 1-4, 2006, Houston, TX**

**<http://www.otcnet.org/2006/index.html>**



Registration is now open for OTC '06, the world's foremost event for the development of offshore resources in the fields of drilling, exploration, production and environmental protection.

## Sponsor & Exhibit at Ports™ 2007

### **Ports™ 2007 "30 Years of Sharing Ideas...1977-2007"**

**March 25-28, 2007, San Diego, CA**

**<http://www.portsconference.org>**



Ports™ 2007 celebrates 30 years of international port and harbor development specialty conferences. This conference is the premiere venue for professionals, issues and ideas related to the ports and harbors, inland waterways and navigational

improvements. For more information on sponsoring or exhibiting at Ports™ 2007, please visit [ww.portsconference.org](http://www.portsconference.org). ■

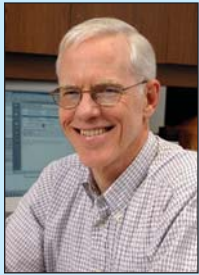
## ICCE 2006 UPDATE

**Ron Noble, Chairman, ICCE 2006 Local Organizing Committee**

The International Conference on Coastal Engineering will be held September 3 to 8, 2006 at the Manchester Grand Hyatt on the waterfront of San Diego Bay in San Diego, California. A listing of the accepted technical papers for oral and poster presentation is posted on the conference website [www.icce2006.com](http://www.icce2006.com). Final abstracts in depth are due by April 1, 2006, with conference registration for all accepted abstracts. The abstracts will be organized into a Book of Abstracts and a Book of Poster Papers for distribution at the conference.

Current information about the pre-conference technical short courses, the conference program, and the post-conference tours can be found on the conference website [www.icce2006.com](http://www.icce2006.com). Both conference registration and registration for the Manchester Grand Hyatt are available online on the website. We are actively seeking additional Exhibitors and Sponsors for ICCE 2006. Information pertaining to Sponsorship and Exhibitor booths is available on the website. ■

## Dalrymple Elected to the National Academy of Engineering



COPRI member Robert A. Dalrymple, Ph.D., P.E. was recently honored with election into the National Academy of Engineering (NAE). Election into the NAE is one of the highest professional honors in the engineering field.

Dalrymple was a founding member of the COPRI Governing Board and Past President. He is currently the Willard and Lillian

Hackerman Professor of Civil Engineering at Johns Hopkins University in Baltimore. Previously he was the E.C. Davis Professor of Civil and Environmental Engineering at University of Delaware and Director of the Center for Applied Coastal Research.

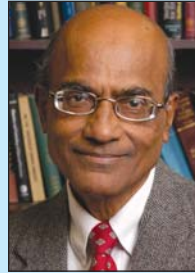
Professor Dalrymple is the co-author of two books with Robert G. Dean Ph.D., P.E.: *Water Wave Mechanics for Engineers and Scientists* and *Coastal Processes with Engineering Applications*. He has received ASCE's Moffatt-Nichol Harbor and Coastal Engineering Award and the International Coastal Engineering Award. He is currently a member of the Marine Board of the National Research Council.

Dalrymple was acknowledged for his contributions to theories and the application to coastal and ocean engineering. He joins the 75 others elected this year, bringing the total U.S. membership to 2,216, with 186 foreign associates.

Congratulations Tony! ■

## MEMBER SPOTLIGHT

**Subrata K. Chakrabarti, NAE, Ph.D., P.E., F.ASCE**



COPRI member Subrata K. Chakrabarti, NAE, Ph.D., P.E., F.ASCE has been awarded the 2005 Lifetime Achievement Award from the Offshore, Ocean and Arctic Engineering (OOAE) Division of ASME International. The award is bestowed in recognition of his distinguished and significant lifetime contributions to the hydrodynamics and fluid-structure interactions in offshore and coastal structure design.

Chakrabarti is a full professor at the University of Illinois, Chicago in the departments of Civil and Materials Engineering and Mechanical and Industrial Engineering. He teaches "Dynamics of Floating Offshore Structures" to graduate students at the university.

Dr. Chakrabarti, a COPRI member and ASCE member since 1973, is the technical editor and major contributor of the recently published *Handbook of Offshore Structures* (2005). He is a 2002 member of the American National Academy of Engineers, one of the highest engineering professional distinctions in the United States. ■

**EDITOR'S NOTE: Nominate yourself or another COPRI member for the COPRI Member Spotlight. Visit [www.coprinstitute.org](http://www.coprinstitute.org) for more information**

## Tidal Hydraulics Committee Moves to COPRI

*Andrew Kennedy, P.E.*

Recent events such as Hurricane Katrina have demonstrated the continuing relevance of engineering works in and around tidal waters, the general domain of the **Tidal Hydraulics Committee (THC)**, which is one of the oldest committees within ASCE. During the ASCE reorganization which brought about the seven Institutes, the membership of the THC decided to align itself with the Environmental and Water Resources Institute (EWRI), but after some time it became clear that our purpose and interests were much closer to the work being done within COPRI. Because of this, the most recent committee meeting saw a unanimous vote to join COPRI.

With the long transition now complete, we wish to take this opportunity to invite new members and solicit ideas from the COPRI community. The THC has one ongoing Task Committee on Tidal Datums headed by Kevin Knuuti, P.E., while the Fluid Mud Task Committee, headed by William McAnally, P.E., has submitted its final paper for publication and

is coming to a close. The next committee meeting is tentatively scheduled to be held during the 30th International Conference on Coastal Engineering (ICCE), September 2006 in San Diego, and potential members are invited to attend.

Tidal Hydraulics Committee Statement of Purpose:

- To promote study of the hydraulics of tidal waters in natural and engineered systems with the aim of improving our understanding of such systems, and increasing our ability to predict reliably and ameliorate the impact of human intervention in the environment.
- To encourage the transfer and application of understanding of fundamental processes and the consequent advancement of engineering practice and technology in the solution of problems in tidal waters.
- To enhance communication and collaboration between practitioners in fields relevant to tidal hydraulics—notably, engineers, geologists, oceanographers and biologists, as well as the various professional societies, as well as the broader community, including regulators, and society at large.

Anyone wishing to become a part of the THC, or with ideas for future direction, is encouraged to contact the Chair, Andrew Kennedy at (352) 392-9537x1432 or at [kennedy@coastal.ufl.edu](mailto:kennedy@coastal.ufl.edu) ■

## Navigation Engineering *continued from page 1*

The United States Marine Transportation System (MTS) consists of over 25,000 miles of waterways and more than 300 ports connecting to 152,000 miles of rail, 460,000 miles of pipelines, and 45,000 miles of interstate highways. In addition to waterways, ports and intermodal connections, it includes vessels, vehicles, users, and stakeholders. Users include all those who depend on the MTS for their livelihood and recreation, and stakeholders include nearly everyone in the country who values economic vitality and environmental quality.

The Waterways Committee recognized a need for a permanent record and readily available navigation system design and operational knowledge, so the committee undertook a mission to preserve it. To that end, the committee has produced three manuals on engineering practice for the inland and the deep draft waterways system.

- ASCE Manual No. 80, Report on Ship Channel Design, 1993
- ASCE Manual No. 94, Inland Navigation: Locks, Dams, and Channels, 1998
- ASCE Manual No. 107, Ship Channel Design and Operation, 2005 (An expanded update of No. 80)

**Waterborne transport moves more than 95% of imports and exports—oil, grain, autos, coal, and many other goods.**

The long term goal of the Waterways Committee is to develop additional manuals and other information media with a focus on specific elements of the U.S. Navigation System. Some potential topics are:

construction, operation, economic analysis, model studies for navigation projects, sedimentation, dredging, and Coast Guard and NOAA activities that support navigation.

The Task Committee has defined the specialty as: Navigation engineering involves the life cycle planning, design, construction, operation, and maintenance of safe, secure, reliable, efficient, and environmentally sustainable navigable waterways (channels, structures, and support systems) used to move people and goods by waterborne vessels. It has begun working to achieve its goals through collaboration with the navigation communities of ASCE, the International Navigation Association (PIANC), and the U.S. Transportation Research Board.

*Please contact committee chair William McAnally, P.E., at [mcanally@engr.msstate.edu](mailto:mcanally@engr.msstate.edu) to suggest current and critical issues in navigation engineering, existing or needed short courses and university courses, and needed reference manuals.*

For more information please view the e-version of our newsletter at: [www.coprinstitute.org](http://www.coprinstitute.org) ■



## COPRI Committee Chairs

**Awards:** James E. Spady - [jkspady@cox.net](mailto:jkspady@cox.net)

**Coastal Engineering Practice:**

Susan Ming - [susan.m.ming@spl01.usace.army.mil](mailto:susan.m.ming@spl01.usace.army.mil)

**Coastal Engineering Research Council:**

Robert Dalrymple, Ph.D., P.E., F. ASCE - [rad@jhu.edu](mailto:rad@jhu.edu)

**Coastal Structures:**

Billy L. Edge, Ph.D., P.E., F. ASCE - [b-edge@tamu.edu](mailto:b-edge@tamu.edu)  
Orville T. Magoon, Hon. M. ASCE - [omagoon@sbcglobal.net](mailto:omagoon@sbcglobal.net)

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**Education:** Louise A. Wallendorf - [Lou@nadn.navy.mil](mailto:Lou@nadn.navy.mil)

**Membership:** Bradd R. Schwichtenberg -

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Patrick J. Hudson, Ph.D., P.E. - [phudson@usna.edu](mailto:phudson@usna.edu)

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**Seismic Design of Piers and Wharves Standards Committee:**

Gayle Johnson, P.E. - [gjohnson@han-padron.com](mailto:gjohnson@han-padron.com)

**Tidal Hydraulics**

Andrew Kennedy - [Kennedy@coastal.ufl.edu](mailto:Kennedy@coastal.ufl.edu)

**Waterways:** Nicolas Pansic, P.E. - [Nicolas.Pansic@us.mwhglobal.com](mailto:Nicolas.Pansic@us.mwhglobal.com)

**Wetlands and Sediment Management:**

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## Become a COPRI Member!

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<http://www.coprinstitute.org/membership/>

or contact Lesa Rair at [lrair@asce.org](mailto:lrair@asce.org) or (703) 295-6370.

## Mark Your Calendar 2006

- April 24-25 **Alternative Maritime Power Conference**  
Los Angeles, California
- May 1-4 **Offshore Technology Conference**  
Houston, Texas
- June 4-9 **The 25<sup>th</sup> Conference on Offshore Mechanics and Arctic Engineering**, Hamburg, Germany
- September 3-8 **30th International Conference on Coastal Engineering**, San Diego, California
- September 18-20 **UPADI 2006: XXX PanAmerican Engineers Convention, XIV PanAmerican Convention of Ocean and Coastal Engineering**, Atlanta, Georgia
- October 9-11 **2006 Fall ASBPA Conference**,  
Long Branch, New Jersey
- December 9-13 **Restore America's Estuaries**, New Orleans, Louisiana
- For more industry events visit [www.coprinstitute.org/conferences](http://www.coprinstitute.org/conferences)



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