



February 14, 2011: Vol. 53, No. 07

Produced by: Richard Watters, P.E.
Chapter Newsletter Editor/ Chairman

The Therm, is a monthly Newsletter for chapter members and HVAC&R professionals alike, that provides information about the Fort Worth Chapter of ASHRAE.

President's Message

Another month is in the books, and it was a busy one:

- The January meeting was presented by Brandon Wallace on How to Specify Acoustic Performance. This seminar helped us to understand basic HVAC acoustic terminology and how to apply and specify noise and vibration acoustic performance criteria
- Our winter party at Joe T. Garcia's was a blast – check out the detailed recap in the special events section. Special thanks to Matt Carter, his committee, and all of our Sponsors (also listed in that section) for their support in making this event a success.
- Members of the Chapter again helped judge the “Future Cities” competition for 7th and 8th graders this year. Find out more about this activity in the student activities section.
- The Society Winter Meeting was held in Las Vegas this year. I hope that everyone that was able to attend made it home safely and didn't get “stuck” in Las Vegas any extra days due to the weather.

I would like to say thank you to everyone who was able to attend our meeting last month on How to Specify Acoustic Performance by Brandon Wallace. We had a total of 49 members and 10 guests attend. We also had a special guest addend the meeting, Prof Robert R Bittle, our TCU ASHRAE Student Chapter Sponsor.

Everyone who attended the meeting last month and the seminar should have received an email with your PDH certificate from Dan Merkel. If you did not receive an email, please contact Dan (dmerkel@texasairsystems.com) and we will be sure that you are included on the distribution list.

Our number of delinquencies is down this month, from 10 to 7 people. Please renew your membership. Also, please remember to pay your local chapter dues. The chapter uses this money to help keep costs down on the chapter activities as well as to support our local student chapter activities.

We continue to make great strides towards the President's Award of Excellence (PAOE). We have been granted nearly 6,166 points so far, putting us about over half of the way to our goal so far. We will need to ramp up our efforts in the coming months to make sure we show up in Dallas as the Chapter to beat.

Our February meeting will be held on Wednesday the 16th. Mike Post will be the presenter on Clean Room Design.

Next Chapter Meeting

Clean Room Design

February 16, 2010
11:30 A.M.

Petroleum Club
Carter::Burgess
Plaza
777 Main St.
39th Floor
Fort Worth, TX

[Click here for map.](#)

President's Message (continued)

This month's meeting will also be our primary membership promotion event for the year. If you know of someone that you think would benefit from membership in ASHRAE and you convince them to come to our meeting and join, lunch is on us. If you get them to sign up online prior to coming, just have them print off their receipt to get credit.

We have an upcoming seminar on Ground Source Heat Pumps. Refer to the following link for additional information: <http://www.ashrae.org/education/page/557>

As I've mentioned before, the Chapter Regional Conference (CRC) will be held this coming April in Grapevine, Texas. We would like to have a strong showing at the CRC this year, so please let us know if you have any interest in attending. In addition to great training opportunities and the annual business meetings, there are also many fun activities and fellowship events that make this trip well worth it. Please visit the following link for additional information: <http://region8.ashraeregions.org/crc.htm>

I am looking forward to seeing all of you later this month and please see our Chapter's Website for future event times.

Sincerely,
[Ian Bost](#) Chapter President

February Program/Speaker Bio.

Speaker Info:

Mike Post

Speaker Bio:

Mike Post graduated from the School of Engineering of Cal Poly-San Luis Obispo with a Bachelor of Science in Industrial Technology in 1983. After graduating he worked at National Semiconductor and Data General as a Facility Engineer in their Semiconductor Mechanical Groups. He then worked as a Mechanical Engineer for the clean room group of Modulair for Cambridge Filter.

In 1987, he started with Pace Clean-Pak as a sales engineer and worked his way to Vice President of the Clean Pak group. He then started the clean room ceiling grid and filtration group at Clean Pak. In 1993 he became one of the founders of HUNTAIR and was in charge of starting the clean room group. He was in charge of sales and engineering and also started the industrial air handler group, Logicaire, at HUNTAIR.

In 2005 he joined M and I West as the general manager of the Portland Plant overseeing manufacturing for custom clean room air handling units, flush grid systems, plenum modules, fan powered filter units, multipak fan arrays, and numerous other products. In 2010, Engineered Air purchased M and I and he is currently the general manager of the Portland Plant.

Presentation Outline:

Clean Room Design

- 1) Particle Measurement
- 2) Classes of Clean Rooms
- 3) Manufacturing Processes for Clean Rooms
- 4) Clean Room HVAC Products
- 5) Flush Grid Systems

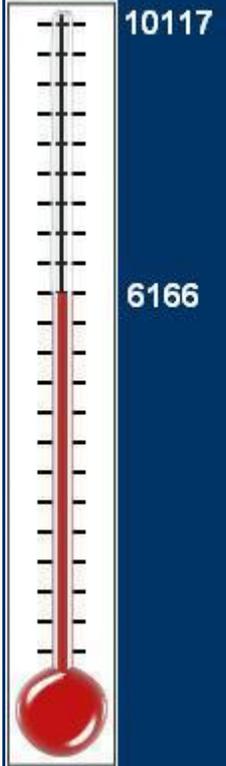
Board of Governors Meeting Minutes – January 19, 2011

Attendees:

11 Members: Daniel Merkel, Jay Sullivan, Nick Schroeder, Tyson Olivo, Ian Bost, Cliff Upham, Patty Parrish, John Rhodes, Matt Carter. Late: Larry Akers and Tony Finch.

Meeting Called to order at 10:38am by Ian Bost, Chapter President. Ian discussed our current PAOE status. Ian will send the PAOE points totals. We are at 125 pts for Historical and par is 200. We will get these points. We are

PAOE Points



RP Dollars



Board of Governors Meeting Minutes – January 19, 2011 (continued)

behind on CTTC and Student Activities as well. On fourth Thursday of March (24th) we may conduct a joint Geothermal Seminar with Dallas ASHRAE on the 26th floor of the UNT Health Science Center. ASPE, AASHE, and BOMA may be included. Fee is tentatively \$150 for the whole day.

There may be a Refrigeration Tour set up at Rahr & Sons.

We need two joint meetings and scholarships for the 2nd semester need to be decided.

Reports:

President-Elect (Watters)

- No Report.

Secretary (Merkel)

- New faces of engineering will not be known until the awards are published. Sorry Chad, no news yet.

Treasurer (Finch)

- Delinquent local dues member listing has been compiled, and people have been contacted. This includes people who are life members. It does exclude Mineral Wells, Abilene, and other outlying areas.

BOG At-Large (Martin, Rhodes, Sullivan)

- No report.

CTTC (Upham)

- We are still waiting to hear about locations, dates, and fees for the Seminar on Commissioning by Mchael Kawacki as well as the March Seminar on Ground Source heat Pump by Dr. Kavanaugh. The February meeting topic will be Clean Room Design by Mike Post. Victor Goldschmidt will speak about Sustainability at the March Meeting. We would like to make this a joint meeting. The meeting will be on the 26th floor of CB Plaza.

Historian (Parrish)

- Patty updated that she is still working toward putting together a history of Golden Gavel and has completed one Recall interview with four more to go. She plans to talk with D.W. Gibson, Romine, Mr. Klien, and Rick O'Connor.

Honors & Awards (Akers)

- Will be working on electronic bios and will send notice to specific people we know are up for awards to update their bios. A reminder to update your bios was issued with the Therm. This is critical for awards and other future items including Membership Upgrades.

Membership Promotion (Olivo)

- The Delinquency Report went down from 22 to 7. Tyson will send out emails for membership upgrades as well.

Research Promotion (Martin)

- The Fall Golf Tournament payment posted and are now included in our PAOE Points, which have been published. We have 735 PAOE points according to the end of year spreadsheet sent out by Society. Society shows 470 on their website which places us at 2nd place in the region. We've also raised the 2nd most dollars in the region and 9th most in Society so far.
- The golf tournament raised an estimated \$6,600-\$6,700, the exact amount was posted in the Treasurer's Report in the Therm.

Board of Governors Meeting Minutes – January 19, 2011 (continued)

Special Events (Carter)

- The Clay Shoot has been scheduled for March 11th. Our Spring Golf Tournament is tentatively scheduled for March 21st with Mark James partially sponsoring us at Timmeron, in Southlake. MJEC will sponsor a portion of the fees.
- Winter Party is next Wednesday, January 26th. The cost is \$40 per person, hors d'oeuvres will be served, and rewards will be given to attendees. Sponsorships are available at the \$250, \$500 and \$1000 levels. Sponsors are given admission tickets for people as well.

Student Activities (Schroeder)

- We are going to invite students to the Winter Party, but don't expect a large showing. The joint meeting with student chapters of ASME & ASHRAE will be scheduled for this spring. It's tentatively set as a lunch meeting for February 3rd.
- We will invite Dr. Dereje Agonafer and Dr. Bittle to our meetings.

Webmaster (Pace)

- No Report.

Welcome (Bartek)

- No Report.

YEA (Martinez)

- We are in need of more Mentees. We are going to extend this program to our student members.

Old Business:

- Our Delinquencies are down from 22 to 7.
- The Petroleum Club will be closed from March 13th through March 26th. Our meeting will be held on the 26th floor.

New Business:

- We need technical articles for the Therm or Website. Make sure you're reporting your activities to the RVC, the President and the Webmaster to include on the Chapter's Website.
- On a sad note: August Pacharchina passed away recently. Our thoughts and prayers go out to him and his family.

President Ian Bost adjourned the meeting at 11:17am.

General Business Meeting – January 19, 2011

Meeting Called to order at 12:00pm by Ian Bost, Chapter President.

Proceeded with self-introductions and the introduction of our guests by Tony Finch. Ian made a special point to introduce Dr. Bittle, the TCU student chapter sponsor. It was at this point in the meeting we talked about the Rose Bowl and TCU's dramatic victory!!!

Old Business:

- Meeting minutes from last month's meeting were approved by motion from John Rhodes and seconded by Jay Martin. They were passed unanimously via acclamation.
- Delinquencies are down to 7 which is 2.3% of membership. This reduction made the chapter qualify for an additional 200 PAOE pts.
- We are at 64% of our PAOE goal! We met par for the following categories: CTTC, Membership Promotion, and Student Activities

General Business Meeting – January 19, 2011 (continued)

New Business:

- As a general point, the ASHRAE website is down momentarily, and should be up and running soon.
- We will be hosting a commissioning seminar, as well as a Geothermal Seminar. We will be inviting other chapters and societies as well to join. Details will be forthcoming. Stay tuned to locations fees etc.
- Jay Martin reminded everyone the Winter Party is next Wednesday, January 26th. The cost is \$40 per person, hors d'oeuvres will be served, and rewards will be given to attendees. Sponsorships are available at the \$250, \$500 and \$1000 levels. Sponsors are given admission tickets for people as well.
- Society Winter Meeting is coming up Jan 29-Feb 2 in VEGAS! If you plan on attending, please let Ian or Dan know so we are sure to get PAOE credit for your attendance.
- We will be co-sponsoring a sporting Clay Shoot. A flier will be forthcoming via email (as they were on the back table). Save the date though for March 11th.
- For our March meeting we will be located on the 26th floor of Carter Burgess plaza, as the Petroleum club is unavailable.
- Buddy Pace, Nominating Committee Chair, spoke.
 - The nominating committee is comprised of Richard Watters, Buddy Pace(Chari), Larry Akers, Cody Pace, Frazier Ringel,
 - This year we have been very fortunate for people wanting to volunteer their time and talents. This is a very positive trend which really shows the health and momentum of the chapter. It wasn't long ago when we struggled for people to want to be involved.
 - The Nominating committee is here to present nominees. No voting is done today. Next month we will open the floor for other nominations, and then we will call for a vote.
 - The nominees are:
 - President Elect: Daniel Merkel
 - Secretary: Tony Finch
 - Treasurer: Jay Sullivan
 - Board of Governors: Sid, Patty Parrish, and Ian Bost
- Cliff Upham introduced our speaker: Brandon Wallace to talk about How to Specify Acoustic Performance.
- Brandon gave a excellent presentation on Howe to Specify Acoustic Performance. Brandon gave real work examples of what to do and what not to do. A copy of Brandon's presentation will be available for download from the Chapter's website.

Technical Session Minutes:

Cliff Upham introduced our speaker.

Speaker:

Brandon Wallace
Southwest Regional Sales Manager of BRD Noise and Vibration Control, Inc.

Topic of Discussion:

How to Specify Acoustic Performance

Synopsis:

- Brandon gave a excellent presentation on Howe to Specify Acoustic Performance. Brandon gave real work examples of what to do and what not to do. A copy of Brandon's presentation will be available for download from the Chapter's website.

Closing:

Ian Bost adjourned the meeting at 12:58pm.

Chapter Financial Report

STARTING BALANCE DATE 12/15/2010
NEW BALANCE DATE 1/24/2011

Treasurer's Report

Tony Finch

Financial Data:

Starting Balance (12/15/10):	\$2,664.00
Deposits:	
01/06/2011 Golf Tournament Payments	\$1,050.00
01/06/2011 Jacobs Sep Oct & Nov 2010 Luncheon Payments	\$1,175.00
01/06/2011 Eventbrite Online Payment for 12-15-10 Luncheon Meeting	\$125.00
01/06/2011 November 30, 2010 Local Dues Paid by National	\$350.00
1/24/2011 Golf Tournament Payments	\$1,140.00
1/24/2011 January 19th Chapter Meeting Collections Cash & Checks	\$945.00
1/24/2011 December 31, 2011 Local Dues Paid by National	\$385.00
Subtotal:	\$5,170.00

Payments:

1/4/2011 Check # 5233 ASHARE Research for UTA Faculty Sponsor Application Fee	\$180.00
1/19/2011 Check# 5234 Petroleum Club- 12/15/10 Meeting parking	\$74.00
1/19/2011 Check #5235 Petroleum Club - Luncheon	\$1,259.59
1/24/2011 Check #5236 ASHRAE Region VIII - Dues for 290 assigned members @ \$3.00 per area assigned member	\$870.00
1/24/2011 Check # 5237 Timarron Country Club- Down Pmt for Spring Golf Tournament	\$1,000.00
Subtotal:	\$3,383.59

New Balance as of 1/24/11:

\$4,450.41

Grassroots Committee Reports

Research Promotion

We have posted \$9,679 raised so far to society, and are hopeful that we made a little bit more at the holiday party (our financials for the event haven't been tallied yet). Our Spring golf tournament will be held at beautiful Timarron Country Club in Southlake on March 21st. Please mark this date on your calendars, We hope that the venue will entice our biggest turnout yet. Be sure to contact Matt Carter or myself about sponsorship opportunities for the event.

Thank you for all of your support so far!
Jay Martin

Special Events

No update.

Thanks, Matt Carter

Grassroots Committee Reports (continued)

Membership Promotion

Delinquencies are at 3%.

Thanks, Tyson Olivo

Student Activities

No update.

Thanks, Nick Schroeder

YEA Committee

It looks like we'll have 13 pairs of mentors and mentees. The participants will know who they're paired with the early part of February.

Thanks, Saul Martinez

ASHRAE Refrigeration Awards

We are looking for nominees who are interested in submitting a project for the following ASHRAE Refrigeration Awards:

Milton W. Garland Commemorative Refrigeration Award for Project Excellence
Refrigeration Comfort Cooling Award for Project Excellence

The Refrigeration Committee of ASHRAE seeks to promote refrigeration education and development at all levels of the society. As a part of these activities, the Committee can recognize and honor two projects annually for excellence. These two awards are the Milton W. Garland Commemorative Refrigeration Award and the Refrigeration Comfort Cooling Award.

The Milt Garland and the Comfort Cooling awards are given to project designers and owners to recognize innovative concepts, incorporation of new technologies, or solutions to complex refrigeration problems. These awards communicate innovative solutions to other ASHRAE members and highlight the technical achievements of ASHRAE members to associated professionals, other societies, and other refrigeration facility owners.

For each winning award the project's designer receives a plaque at ASHRAE's annual meeting. The winning project is described in the printed program along with the names of the awardees. The project's owner is honored with a plaque at a refrigeration program meeting of the local ASHRAE Chapter. And the local Chapter receives a felt patch to go on its award banner. Winning projects are announced in Insights, the ASHRAE Newspaper; and a news release is developed and distributed to the Chapter and award recipients for use in other publications and media. Documentation accompanying the winning projects is also made available to ASHRAE's Journal.

Refrigeration plays a critical role in the health, safety, and comfort of humanity. Sharing inventive solutions and technological developments ensures that the refrigeration field continues to advance in meeting these needs. Participation in these Award competitions brings peer recognition to innovative projects, recognizing the commitment made by owners and the technical proficiency of the project design team.

Additional information can be found at the ASHRAE web site www.ashrae.org/refrigeration.

Please contact Clif Upham (Chapter Technology Transfer Chairman) if you are interested in submitting a project for one of these awards at clif.upham@engineeredair.com.

ASHRAE's 2012 Winter Conference Seeks Papers on High Performance Buildings, Integrated Design, Energy Modeling and Specialized Applications

ATLANTA— Papers addressing advances in high performance buildings, integrated design and numerous high-intensity HVAC applications are being sought for ASHRAE's 2012 Winter Conference in Chicago, Ill., Jan. 21-25.

The Specialized Applications track focuses on high-intensity HVAC applications, such as laboratories, hospitals and data centers, and seeks papers on design recommendations, regulations and lessons learned.

The Integrated Design track addresses how the integrated building design and integrated project delivery processes are being applied to build better buildings. Papers are being sought on case studies, lessons learned and ongoing research projects studying new project delivery methods.

The Energy Modeling Applications track seeks papers that address the range of different energy modeling and Building Information Modeling tools available, their use and specific applications, including systems, building and communities. Papers that address an integrated approach from modeling through end designs are requested.

In addition, papers are sought for tracks on Operations & Maintenance, HVAC Systems, HVAC Fundamentals and Applications, Professional Skills and Refrigeration.

The deadline for paper submissions is April 18, 2011. For complete information on tracks, contacts and submittal requirements, visit www.ashrae.org/chicago.

Full-length technical papers or conference paper abstracts (400 words or less) should be submitted by April 18.

For more information about the two types of papers and how to submit a full-length technical paper or conference paper abstract, go to the ASHRAE Chicago Conference webpage: www.ashrae.org/chicago. For accepted conference paper abstracts, the completed conference papers will be due July 8, 2011.

The Conference is expected to attract some 3,000 attendees from 60 countries. The technical program takes place Sunday, Jan. 22—Wednesday, Jan. 25, and includes paper presentations as well as non-paper presentations. Approved papers are published in ASHRAE Transactions. Held in conjunction with the ASHRAE conference is the ASHRAE-cosponsored AHR Expo, Jan. 23-25.

Duct Fitting Database Latest ASHRAE Resource to Become Mobile App

ATLANTA —ASHRAE's popular Duct Fitting Database desktop application has become even more valuable as a smart phone app, allowing engineers to make complicated calculations in the field and receive faster results.

Developed for Apple's iPhone, iPod touch and iPad, the ASHRAE Duct Fitting Database (DFDB) app allows users to perform pressure loss calculations for more than 200 HVAC duct fittings in both I-P and SI units.

This new application ensures that engineers in the field have instant access to the most accurate information without having to return to their office to perform calculations. The mobile app features dynamic illustrations of each design, allows for easy use on the job to do quick duct pressure loss calculations and the inputs can be adjusted by touch and installation is automatic.

Other special features of the DFDB app are as follows:

- Users can create individual projects, each with unique input values and results.
- Each fitting has its own custom set of input parameters and results.
- Users can easily change the minimum and maximum allowable values for all input parameters.
- Users can display and email two types of reports, which include a spreadsheet attachment that can be opened on a desktop computer to do further analysis.

The DFDB app is the second mobile app to be released by ASHRAE. The Society published the 62.1 app in the winter of 2010.

The ASHRAE DFDB app can be purchased through Apple's online iPhone App Store for \$19.99. This initial release of the ASHRAE DFDB app includes supply and common round fittings only, though subsequent versions including all of the remaining fittings will be released monthly. Those who purchase the app now will receive these updates as free

Duct Fitting Database Latest ASHRAE Resource to Become Mobile App (continued)

upgrades.

This app was developed for ASHRAE by Carmel Software Corp., a firm specializing in the development of engineering and scientific mobile and tablet software applications.

ASHRAE is an international technical society that fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

Final Energy Savings Figures Announced for 2010 Energy Standard

ATLANTA – More than 30 percent energy savings can be achieved using the recently published 2010 version of Standard 90.1 vs. the 2004 standard, according to an announcement made today by ASHRAE at its 2011 Winter Conference, taking place this week.

ANSI/ASHRAE/IES Standard 90.1-2010, Energy Standard for Buildings Except Low-Rise Residential Buildings, which provides minimum requirements for the energy-efficient design of buildings except low-rise residential buildings, was published in November 2010. ASHRAE was awaiting the final results of analysis work from Pacific Northwest National Laboratories in support of the U.S. Department of Energy (DOE) Building Energy Codes Program on addenda included in the standard. The final figures were made available this week and were announced today at ASHRAE's annual press breakfast.

Without plug loads, site energy savings are 32.6 percent and energy cost savings 30.1 percent. Including plug loads, the site energy savings are estimated at 25.5 percent and energy cost savings 24 percent.

“Three years ago, the 90.1 project committee set an aggressive goal of 30 percent savings for the 2010 version,” ASHRAE President Lynn G. Bellenger said. “That the target was met and exceeded is a testament to the talent and dedication of the men and women from ASHRAE and the Illuminating Engineering Society (IES) who developed and evaluated over 119 change proposals to increase the stringency of our flagship energy conservation standard. At the 35th anniversary of Standard 90.1, it continues to lead the way in our industry as the minimum standard for energy efficiency.”

On a nationally aggregated level, building type energy savings ranged from 8.8 percent to 38.3 percent and energy cost savings from 7.9 percent to 33.6 percent. These figures include energy use and cost from plug loads.

Extensive analysis work was performed by a team from Pacific Northwest National Laboratories in support of the DOE Building Energy Codes Program. Sixteen different building prototypes were modeled in 17 different climate zones for a total of 272 building types and climate zone combinations.

How was the energy reduction achieved? Here are a few examples:

- The Scope was expanded so that 90.1 covers receptacles and process loads, including data centers. This allows future addenda to the standard to address energy consuming equipment and systems previously outside its scope.
- Building Envelope: Continuous air barrier and cool/high albedo roof requirements were added.
- Lighting: Most interior Lighting Power Densities were lowered, and additional occupant sensing controls and mandatory daylighting requirements were added for specific spaces, along with a new five-zone exterior Lighting Power Density table.
- Mechanical: Most equipment efficiencies are higher, energy recovery is required in more applications, economizers are required in more climates and more energy-conserving controls are required.
- Modeling requirements have been clarified and expanded so that building modelers can more accurately compare energy cost of their building project with an appropriate baseline building as defined by the standard.

“The 90.1 standard is a fluid document,” Mick Schwedler, immediate past chair of the 90.1 committee, said. “As technology evolves, the project committee is continually considering new changes and proposing addenda for public review. The rigorous, open, public review process following ASHRAE and American National Standards

Final Energy Savings Figures Announced for 2010 Energy Standard (continued)

Institute (ANSI) procedures, results in a document that is both technically sound and reaches consensus.”

“I agree wholeheartedly with Mick on the strength attributes of Standard 90.1 based on our ASHRAE/ANSI consensus process,” echoed Steve Skalko, current chair of the committee. “As we look ahead to exploring new areas of energy savings from energy consuming equipment and systems, we will seek input from materially affected and interested parties. We welcome their input to help the project committee in this endeavor.”

The standard is written in mandatory code language and offers code bodies the opportunity to make a significant improvement in the energy efficiency of new buildings, additions and major renovations.

Chapter Officers and Committee Chairs

Officers

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Student Activities	Nick Schroeder	(817) 272-9075	nschroeder@uta.edu
Special Events	Matt Carter	(817) 805-0020	mattc@mjec.com

Editor's Notes

There are many notices coming soon. Please watch for these in your upcoming Chapter Newsletter. Things that have been discussed and may be coming: (if you have any input on one of them or all of them please contact your Chapter Board Members)

- Fall Sporting Clay Tournament (date TBD)
- Don't forget CRC in Dallas, Texas - April 14th through 16th
- Spring Golf Tournament (date TBD)

If anyone has news that pertains to ASHRAE locally please let me know and we will see about including it in an upcoming Therm.

Remember: **THIS IS YOUR CHAPTER NEWSLETTER.**

Thank you, Richard Watters

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