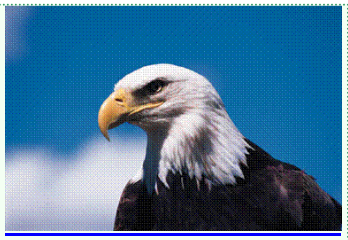
SpotLight on Maintenance

OPFMA Newsletter - Connecting Knowledge with Public Facilities' Needs!
Fall 2010

Ohio Public Facilities Maintenance Association

OPFMA is a not for profit 501(c) (3) independent educational trade organization



Inside Edition:

Editor's Note:
Next Edition - December 2010
Submit your articles or ads by Nov 30, 2010. Terms on page 8

OPFMA – 2010 Third Quarter Activities

By Alexandra Schneider, OPFMA Administrator

As every year, the Conference and Trade Show dominates this quarter!

OPFMA Conference Committee led by Chairman, Ron Atkins, working closely with staff had finalized the complex layout of this yearly event. Speakers and exhibitors are lined up and ready for the opening!

Very Special Thanks to Chairman, Ron Atkins, and his committee for the tremendous effort and reaching the goal way ahead of time!

Attendees - the main reason of having the Annual Conference - **the Early Birds had the best response ever - THANK YOU!**

OPFMA staff is in high gear putting together the literature and items getting ready for meeting you at the grand opening on Oct 25th!

Meantime, another ten BOC classes have been administered in Dayton and Columbus; Seven BOC Level-1 and three BOC Level-2.
A new BOC Level-1 Series started on Sept 23rd in Columbus as planned.

OPFMA Board held a board meeting on July 28th at M.E. Co in Columbus.

Today's economic climate impacts OPFMA revenues as it does for any other business in the country and there is a 31.5% drop in revenue this quarter vs. 2009, but OPFMA will not cut in service quality or benefits and keeps same attendance's fee as in the previous years!

Amazing support came this quarter from OPFMA Membership which is 280 % higher than it was in 2009 same quarter!

OPFMA's focus is on addressing the membership's educational needs.

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Oct 25th & Oct 26th
OPFMA 2010 Conference
&
Trade Show

Registration Deadline
Oct 11th 2010

Registration Forms posted on: www.opfma.org

Reserve your room ASAP to benefit from OPFMA Group special rate!

Call Crowne Plaza Hotel at (614) 885-1885

Special Appreciation
OPFMA 2010 Conference Exhibitors Sponsors!

Johnson Controls
The Brewer- Garrett Company

2010 OPFMA Trade Show – Registration Closed!

Exhibitors' early response is much appreciated!
Once again, willing exhibitors turned away!

The Grand Ballroom is packed to the max with a large and diverse group of vendors providing solutions, products and ready to answer attendees' questions!

Exhibitors' Raffle is held through out the exhibition adding fun and opportunity of winning great prizes!

You must be present to claim your prize!

OPFMA – 2010 Third Quarter Activities

By Alexandra Schneider, OPFMA Administrator

OPFMA responded to membership's expressed interest of having a seminar on green cleaning preparing the path to the new era of cleaning requirements that in the near future all public facilities must meet.

OPFMA expresses deep appreciation to **Cleveland State Univ.** – *a long time OPFMA member* – for graciously hosting and partnering with us that made possible the **Green Cleaning Seminar** on Sept 16th 2010!

Special appreciation of OPFMA's new Corporate Associate member – **DawnChem** – that on short notice accepted the invitation and put together a great presentation and a panel discussion for the four hours seminar!

OPFMA would like to recognize attendees – as well as their facilities that make a priority of keeping their personnel well informed and in step with today's more stringent standards.

Meet the **Green Cleaning Seminar** attendees - listed alphabetically:

Green Cleaning Seminar – Cleveland State University

Don Brown (Westlake City Schools), Linda Champion (Cleveland State University), William Damron (Maumee Valley County Day School), Dennis Damsa (Barbeton City Schools), Michael Duffy (Orange City Schools), Garrett Fitzpatrick (Elyria City Schools), Daniel Goldsmith (Elyria City Schools), Brad Heilman (City of Westerville), Tim Heiman (Westlake City Schools), Jeanie Jefferson (Simon Professional Services), Arthur Jenkins (Elyria City Schools), Sarra Kubow (Lakewood City Schools), Bob Langenfelder (Ehove Career Center), Eric Shoop (Cleveland State University), Denny Valencic (City of Euclid), and John C. Wolf (Columbiana County Board of DD)

♦ BOC Level-1 Graduates – Columbus ♦

March 2, 2010 – August 12, 2010

OPFMA Board of Trustees and Administration Congratulates the Graduates!

OPFMA praises all facilities that regardless of the dire economic times had made a high priority of training and certifying their employees!

The hard working employees and BOC Graduates - *as others before them* - will apply the knowledge and skills learned through the BOC program in their jobs increasing their productivity and leading with confidence!

OPFMA offers assistance to the BOC graduates beyond Graduation Day!

Meet the BOC Graduates:

James Aumiller (Capital University), Dennis Borton (Cuyahoga Falls City SD), Steve Canfield (Upper Scioto Valley Schools), Vince Corcoran (Ohio Dept of Youth Services), Ryan Dalton (DAS/GSD/Facility MGMT), Ian Daniels (Columbus Public Schools), Kevin Ferback (Erie County Board of Dev. Disabilities), Brian K. Hammen (DAS/GSD/Facility MGMT), David Hausmann (Whitehall City Schools), Ken Logan (Columbus Public Schools), Kevin Martin (Hocking Technical Collage), Larry Pritchard (Chillicothe City Schools), Chester Sayre (Columbus Public Schools), Scott Webb (Scioto County Career Tech. Center), and Richard Wertz (Columbus Public Schools)

OPFMA New Members – Welcome Aboard!

Institutional II

Westlake City Schools – Dave Puffer **–** Director of Business Affairs

Cuyahoga Falls City Schools - Dennis Barton – Custodial Maintenance Supervisor

Institutional I

City of Westerville Parks and Recreation - Brad Heilman, Facility Maintenance Manager

Elyria City Schools – Richard Nielson **–** Dir. Business Services

Individual Members

Mark E. Brown - Maint. Supervisor - Barberton City Schools

Jeanette Carpenter – Facilities Director - Knox County Board of DD

C. Douglas Trowbridge – Maint. Supervisor **-** Knox County Board of DD

Jim Acton – Director of Bus. & Academic Serv. - Finneytown Local District

Dave Winckowski – Facility Services Manager - Owens Community College

John Zinn – Maintenance Supervisor - Vinton County LSD

Ron McCleese – Maintenance - Eastern Local Schools

Stacy Frase – B & G Supervisor - Northwest Local Schools

Scott McCarthy – Maint. Supervisor - Buckeye Central Local Schools

Dale Chance – Facility Manager **–** O'Neil & Associates, Inc

Mark Miciak - Facility Manager – Polaris Career Center

Jack Haag – Operations Supervisor **–** West Carrollton City Schools

Bill Mullins – Proj. Supervisor – Eastern Brown Local Schools

Dan Otto – Maintenance **–** Eastern Brown Local Schools

Bill Krugman – Bldg & Grounds – Elyria City Schools

Roger C. Frommer – Maint. Director – Liberty Benton Schools

Corporate Associate Members

Lennox Industries - Ron Palmer **–** Regional K-12 Manager

Dawnchem Inc. - Tony Mercuri – Regional Sales Manager

Evolved Energy Solutions, Inc. - Zack Griffin

M.E. Companies, Inc. - Kevin E. Wood, P.E., BCEE - Vice President

Elitaire - Bill Schriner – Accounting Manager

Wadsworth Slawson - David Mang – Project Manager

JB Sales and Marketing, Inc. - Joe Bowman – President

The Top 20 Facilities with Highest Participation in OPFMA Educational Events from 2005 to 2010

1 Lima City Schools
2 Lakewood City Schools
3 Cleveland State University
4 Lucas County Facilities
5 Capital University
6 DAS/GSD/Facility Management
7 Franklin County Commissioners
8 Columbus Public Schools
9 Johnson Controls Inc
10 Wapakoneta City Schools
11 Lorain Correctional Center
12 Medina City Schools
13 The Brewer-Garrett Co.
14 Ohio Dept. of Transportation Central Office
15 Mad River Local Schools
16 Warren City Schools
17 Sinclair Community College
18 New Albany Plain Local Schools
19 Adams County/Ohio Valley Schools
20 Vandalia-Butler City Schools

THANK YOU for YOUR Consistent and Tireless Support!

Find Some Breathing Room in Your Budget

By Ron Palmer, Regional K-12 Manager, ***Lennox Industries***

With school budgets shrinking, it's essential that your staff find ways to pay less for vital equipment and services without compromising the quality of the learning environment. Reviewing your facility's HVAC system offers several cost-cutting opportunities – from reduced energy bills to lower repair costs – that protect classroom comfort.
Here are three ways to start saving today:

1. Create a maintenance checklist – When you're busy and understaffed, regular maintenance can fall by the wayside, but poorly maintained HVAC systems cost more to operate and may affect your school's indoor air quality.

   Checking air filters regularly, tightening belts and cleaning coils at least yearly can save energy and cut unexpected service calls.
   To see a maintenance checklist for rooftop and split system equipment, and other tips for HVAC equipment, visit the Lennox Learning section on LennoxCommercial.com.

2. Investigate leasing programs that provide you with high-efficiency HVAC equipment with little or no upfront investment.

   Installing an Energence™ rooftop unit, the first system of its kind to break the 17.0 SEER efficiency barrier, immediately reduces utility bills and expensive repairs.

A school in Columbus, Ohio could reduce annual cooling costs 33 percent by replacing a single 9.0 SEER 5-ton unit with a 17.0 SEER 5-ton unit, based on reducing annual cooling from an estimated $705 to $472 per unit (average electricity cost of 10 cents/kWh).

3. Control mold-producing moisture without overcooling. Turning up the air conditioner to remove humidity simply increases energy bills and makes students and faculty more uncomfortable.

   Incorporating a hot-gas reheat dehumidification option or accessory such as the Humiditrol® dehumidification system for RTUs or split systems allows effective moisture removal even on mild days when the sensible cooling load isn't as high. It's more efficient than using one compressor to cool and dehumidify the air and another to reheat the air.

Steps like these can save you 10 percent, 20 percent or more on your energy costs and other expenses.

Editor's Note:

For questions, or more money-saving ideas, contact Mr. Ron Palmer at: Ron.Palmer@lennoxind.com.
Also find more tips and school-specific information at www.lennoxcommercial.com.

Monitoring Energy Use -The Power of Information

What Should You Measure and Why?

By Chuck Ednie, Schneider Electric

Tracking passive and active improvements

One challenge in managing energy use is that not all improvements require the same oversight. In general, energy improvements can be grouped into two categories: active and passive.

A minority of improvements are passive, such as insulation or LED "Exit" signs. These deliver the same results without any adjustment, calibration, lubrication, or monitoring. The only question is whether they are there, or not. Checking on their existence requires only minimal effort. Most improvements are active, meaning they require periodic action in order to continue delivering a benefit.

Active improvements include awareness programs, lighting schedules, economizers, automated flushers, and many other activities that require attention and ongoing maintenance after the initial project checkout. Unfortunately, active improvements can be easily derailed by inattention. They can be stopped, turned off, bypassed, corrode away, or simply be forgotten.
All benefit is then lost, and the result is potentially poorer performance than if no attempt was made in the first place. Any energy plan needs to go beyond the initial planning and implementation stage, and include a long term strategy for monitoring and sustaining the improvements.

Does it work?

The basic question for any energy improvement is, "Does it work as designed?" This is the building block for sustained benefit and continuous improvement. It is expected of any project, yet all too often left for another day. Both passive and active improvements need to pass this hurdle.

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For passive improvements, however, this is the extent of any measurement needed, and then sustained benefit is assured.
Active improvements must continue to revisit this question. For example, the proof of improvement, such as time scheduling, can be the creation of time schedules in building spaces and equipment. Initial operation can demonstrate implementation, but doesn't show that a strategy is still in place and working a year from now.

Continuous improvements

Just as "you can't manage what you don't measure," you can't improve it either. Businesses have embraced programs, such as Six Sigma, in order to better respond to their customer's expectations. Customers have expectations of their building environments, so continuous improvement approaches apply to building environments as well. The same strategies and data measurements used to show a strategy is working, can also help determine and prioritize further improvement.

Valuable Information and Actionable Measures

The key to energy management is, of course, actionable measures based on real information. But top-level energy metrics are the culmination of daily operations and many decisions made by people, processes, and technology. By the time a top-level issue is recognized, it can already be costly. What strategies deliver the information to act, before a problem develops? In practice, a combination of methods will produce the information to assess and control an active improvement without becoming overly expensive.

Measurement methods take the following three general forms:

- Comparison
- Indirect measurement
- Direct measurement

As long as the measurements are taken on a regular basis, over time they show trends, which can be periodically reviewed to determine if the improvement is performing as intended. The measurement method that is selected depends on the level of information required.
Choosing a methodology will depend on the size of the project and the degree to which results can be impacted.

Which Methodology Should You Use?

Choosing a methodology will depend on the size of the project and the degree to which results can be impacted. For example, a small project may only justify an indirect measurement. On the other end of the spectrum, if one meter measures electrical use for a large complex and the energy project is for just a single building, then bill comparison does not make sense because the improvement in one building will not likely have a significant impact on the entire utility bill of the complex. A direct measurement, such as adding a sub-meter, would make more sense in this situation.

Information You Can Act On

Buildings are dynamic entities, with constantly changing needs and occupancy. One-time energy audits show only a snapshot of energy use and monthly utility bills only act as a "rear-view mirror."
Busy operations staff may not have the time, tools, or training to analyze monthly/annual energy use and investigate causes. Because of the complexities of energy use and its large economic impact, a growing number of firms are turning to Energy Remote Monitoring to provide the technology and know-how to guide, measure, and help manage energy costs.
Instead of one-time energy improvements, companies need to focus on sustaining and improving energy use over time, and this requires continuous monitoring, analysis, and reporting of building performance.

Editor's Note:

For more info – contact Mr. Chuck Ednie at (614) 348-2099 or email to: chuck.ednie@buildings.schneider-electric.com

Cooling Contingency Planning

Be Prepared for Catastrophic Failure

Blake Moore, LEED® AP, CEM – Trane Building Services Acc. Mgr

Being prepared for the unexpected is good management practice in any industry or institution. Success or failure is critical to the comfort of the occupants and the function of the institution. Reliability is crucial. Advance planning in case of building system failure is critical. Failure of the heating, ventilating and air conditioning system (HVAC) could be catastrophic. However, a well-crafted Cooling Contingency Plan can reduce such risks, improve component redundancy, and prepare the facility for rapid deployment of temporary equipment to sustain critical operations.

The benefits of such a plan include minimizing operational emergencies, enhancing reliability and reducing the economic, legal, or other long-term implications that could result from a major HVAC system failure.

What is a Cooling Contingency Plan?

A cooling contingency plan defines your response to a HVAC system emergency before it happens, including preparing facilities to enable operational continuity and steps for recovery.

It also includes reducing risk, adding or improving component redundancy, and preparing facilities for rapid deployment of temporary equipment suitable to sustain critical operations.

Designing the Cooling Contingency Plan

Start by addressing the possible consequences of a major HVAC outage: How dependent are critical and on-going operations, equipment and advanced technology, facilities, information systems, and other resources on comfort cooling or process-chilled water? What effect would there be on such operations if the cooling system failed or needed to be shut down for unplanned service?

What would be the cost of not having cooling for an hour, a day, a week? Qualify and quantify the impact and related costs.

Determine who understands the consequences of failure and comprehends the interplay and dependence between the facility's critical operations and the system. Who has in-depth expertise in and experience with the details of the facility's HVAC systems and the available alternatives? The answers will create the outline of the plan and identify the players who need to be involved.

Key Plan Components

Realizing the need for a plan is the first critical step. The second is assembly of a multi-disciplinary team.
A successful team includes members who bring all of the knowledge and experience needed using both on-staff personnel and outside experts.

The team must make sure all emergency situations are considered, and issues are documented, and the necessary equipment and resources are ready to be activated as needed. This can be as simple as having back-up power generators on-site or as detailed as having contracts for contingency services and appropriately specified rental equipment already signed.

Key components of the plan include provisions to:

- Document current HVAC equipment in use
- Identify potential sources of failure, profitability, and document the cooling required maintaining critical areas
- Match specific equipment and required connection components needed. Determine required response time frame and budget.
- Determine the appropriate location for temporary equipment and logistics required to run it, including electrical and water connection points.
- Assign roles and responsibilities for each team member.
- Determine how to adapt the existing system and prepare the facility to use a temporary solution.
- File, review, train and update response plan and system specifics regularly.
- Conduct periodic cooling contingency drills.

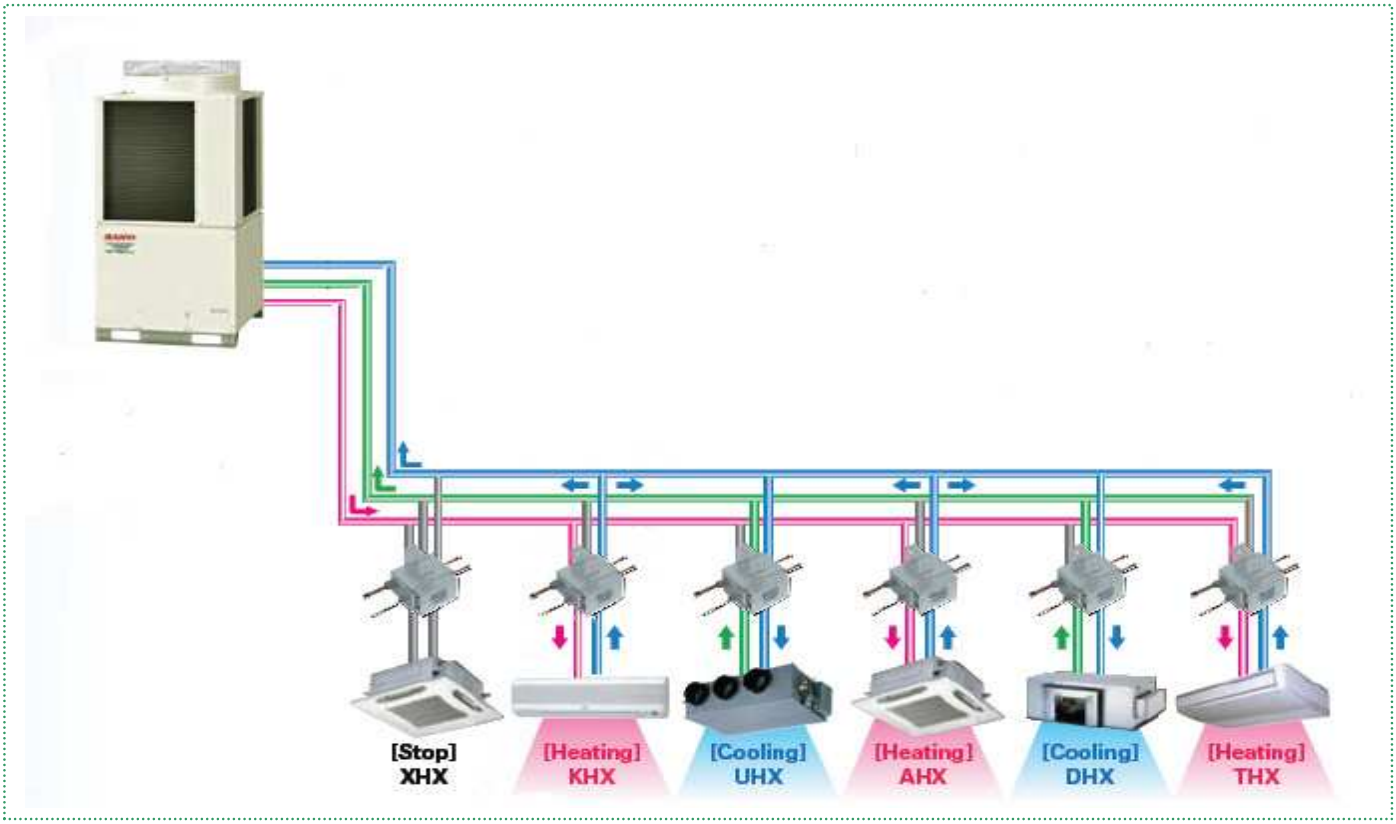
The successful implementation of a Cooling Contingency Plan that can be put into action immediately and seamlessly upon demand is quite simply "mission critical." A well thought-out Cooling Contingency Plan is a sound investment in your building, your technology, and your occupant comfort.

Editor's Note:

For more info contact Mr. Blake Moore at: (614) 473-3500 or e-mail to: bdmoore@trane.com

Variable Refrigerant Flow Technology Provides Opportunity & Energy Savings

Greg Drensky, Vice President, Jacco & Associates



Variable Refrigerant Flow (VRF) technology is fast becoming a popular HVAC system due to its flexibility, performance and energy saving capabilities. A VRF system consists of common HVAC components, including an air-cooled heat pump, indoor fan coils, refrigerant piping and an energy management system.

VRF heat pumps can be placed either outdoors or indoors. By placing the heat pump outdoors you eliminate the need for any mechanical rooms. You also have the ability of running up to 985' of piping, including up to 165' of vertical distance, making it ideal to place a unit on the roof of a multi-story building and feeding the floors below. There are six indoor unit styles available in different capacities to fit your space requirements, and up to 40 indoor units can be connected to one common heat pump system. The fan coils are provided with either wired or wireless sensors that communicate with the entire HVAC system to optimize performance and efficiency. The brain behind the system is a microprocessor-based controller. The system controller communicates directly with each indoor fan coil and the outdoor heat pump, collecting data necessary for proper performance and operation. A thermostat in the space individually controls each indoor unit. The controller also allows the user to program schedules, receive alarms, and do real-time diagnostics. It can be viewed through a web browser or it can be integrated into any Building Automation System.

For proper ventilation a Dedicated Outdoor Air System (DOAS) should be provided. The DOAS will deliver humidity controlled, neutral temperature air to the space per local codes. This flushes the building with fresh, clean air, and does not recirculate contaminated air throughout the building. In the end you have a healthier and more productive environment for the building occupants.

Many of today's building owners are looking for low cost energy efficient and environmentally friendly systems. The VRF system is a solid combination of function and performance from design and construction through maintenance and operating costs. The combination of inverter driven compressors and condenser fans, electronic expansion valves, multiple speed indoor fans, and environmentally friendly R410a refrigerant allows you to hit the pinnacle of energy efficiency and thermal comfort within your buildings. Plus the ability to fit all of this within a very small area, typically less than six inches of ceiling space, means it can be applied to practically any building. If you're looking to retrofit an existing building or provide the most economical HVAC solution for new construction you should strongly consider a VRF system.

Editor's Note

For more info contact Mr. Greg Drensky at:
(330) 463-0100 ext 126 or e-mail gregd@jacco.com

2010 Board Meetings Schedule:

Feb 24th
April 21st
June 23rd
Dec 1st

Board Meetings Host

M.E. Companies
635 Brooksedge Blvd.
Westerville, OH 43081

Phone - Conferences

Conf Comm. - Jan 13th
Board Session - Jan 27th
Phone - Conf as needed

Conference Committee

Feb 24th
April 21st
July 28th
Sept 1st
Oct 24th

2010 Conference & Trade Show
Oct 25th & Oct 26th

For newsletters' archive visit our website!

www.opfma.org

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Note from the Editor:

Dear reader, OPFMA publishes the "SpotLight on Maintenance" for your benefit; to serve better your interests - your feedback is of a paramount importance!

Suggestions - Sharing Experiences - and Constructive Criticism! Your contribution could help by adding to the newsletter topics and ideas that are of special interest to you!

Let your voice be heard - Just drop a note at: editor@opfma.org or visit our web site and click on "TELL ME MORE" - I would be happy to bring your ideas in The SpotLight!

Thank you,
Alex

Publication and Submission Information

"Spotlight on Maintenance" is the official publication of the **Ohio Public Facilities Maintenance Association,** a 501(c)(3) not for profit organization for educational and professional development of public facilities maintenance employees.
It is published quarterly and distributed in the second half of the month of March, June, September and December.
A special edition would be added as events dictate.
All materials published are copyrighted. The editor/publisher is Alexandra Schneider.

Deadline for articles and photos' submission is the 1st day of the month of publication.

All documents for submission must be **submitted in Word format** and sent as an email attachment.
All photos must be in **JPEG format** and sent as an email attachment.

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