

GROUND SUPPORT WORLDWIDE

How to 'Ramp Up' New Ramp

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Kuala Lumpur International Airport Builds 'Next Generation Hub'

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Little Actions Ensure Safety on the Ramp

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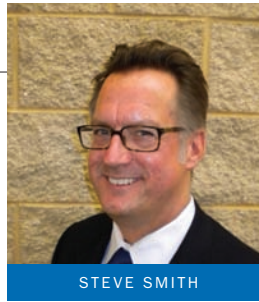
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'A Gathering Of The Tribe'

New products, new friends, our own documentary on baggage handlers ... oh, yeah, and that box of 250 tarantulas.



STEVE SMITH

Our headline is how one of our winners of this year's Ground Support Leaders of the Year awards described the attendees at this month's Cygnus Aviation Expo.

I went up to shake hands with Bill Jacob after he won our Lifetime Achievement Award.

"Back in the old days," Bill told us during our packed Networking Party, "the readers of your magazine used to consider this show to be 'a gathering of the tribe.'"

Bill no doubt has plenty of memories of getting together with the tribe. Our magazine has only been around for half of Bill's career at Eastern Airlines and the United Parcel Service.

I like that phrase – a gathering of the tribe. It's a great way to think about what we presented last week and what we plan for each issue of *Ground Support Worldwide*.

I became an official member of the tribe at the start of the week when we spent a Monday morning with Rico Villalobos, Southwest Airlines ramp manager and his



SWA ramp agents at LAS expect to do six turns in an 8 1/2-hour shift.

ground crew outside Gate C2 at McCarran International Airport.

Baggage, we expected. But that wooden crate with "(250) TARANTULA SPIDERS" written in magic marker sort of threw us a bit. Most importantly, we filmed all this activity for a special webcast. Stay tuned.

The day after – more tribalism. This time 18 holes with a J&B Aviation outing. No spiders this time, but we played in 70 mph wind gusts. I ended up playing with another one of our winners – Chief Warrant Officer Gregory McDermott, United States Coast Guard, who earned our Team Leader award.

At the Expo, we saw new products, which we'll cover in our next issue. Plus, we certainly met plenty of people who gave us interesting story ideas.

Finally, we think the biggest story of the week was what we plan for next year's show. Find out more at <http://aviationproslive.com>.



Bill Jacob, vice president of the UPS ground support division, with his Lifetime Achievement Award.

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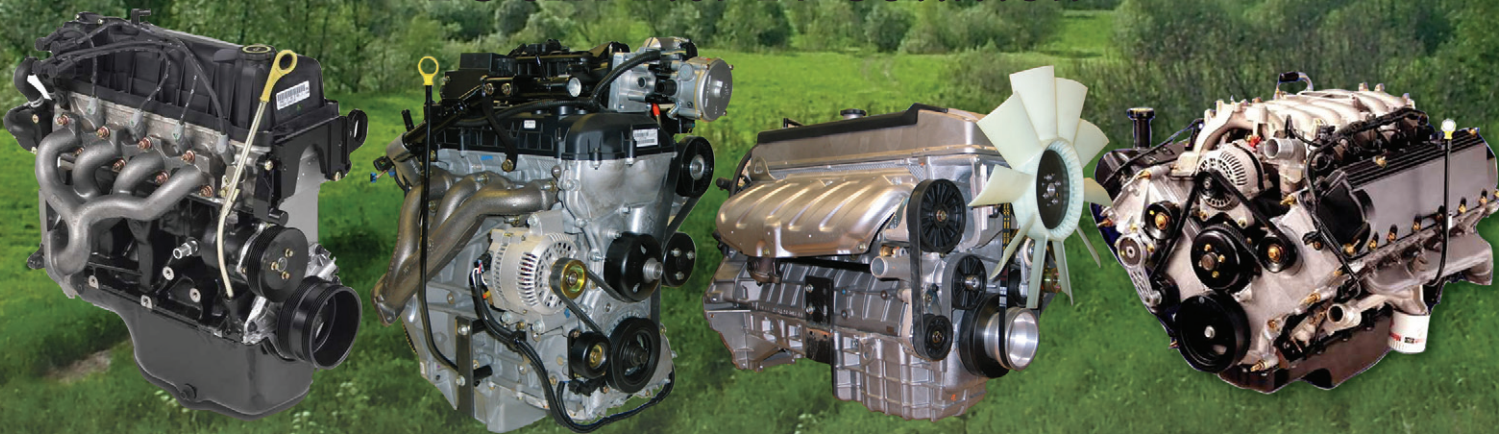
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Shanghai, China

<http://www.abace.aero/2012/>

April 3-6

55th Annual AEA International Convention & Trade Show
Washington, D.C.

www.aea.net/convention/DC2012

Business Buzz

■ **Delta's Temp Program At MSP:** A Delta Airlines program called Ready Reserve that uses temporary workers for numerous positions at the Minneapolis-St. Paul International Airport is drawing fire from the carrier's full-time staffers who say it jeopardizes their jobs and pay. The temporary jobs start at \$10.82 and include baggage handling and deicing planes.

■ **Half Penny In Profits:** Airlines for America says the industry earned less than half a penny in profits for every \$1 of revenue generated during 2011. The trade group laid out a five-point plan that would lower taxes; reduce regulations; remove limits on foreign investments; upgrade aviation infrastructure and reduce oil price speculation.

■ **Middle East Traffic Up:** International Air Transport Association said that in January, Middle East airline traffic recorded a growth of 14.5 percent compared to January 2011. IATA added that the region's airline capacity rose 10.6 percent; however, freight traffic dropped 8 percent.

■ **TMHU Launches Fuel 'App':** Toyota Material Handling, U.S.A., Inc. launched its Toyota Forklift Fuel Efficiency Calculator application to help customers estimate fuel efficiency savings and performance of their forklift fleets.

■ **Airport, Airline Team Up:** Russia's Vnukovo Airport and Transaero Airlines have agreed to cooperate to improve ground handling of passengers, luggage, air mail and cargo quality in full compliance with ICAO and IATA requirements as well as rules and regulations of the Russian legislation.

■ **US Airways Objects:** US Airways Group Inc. said in a Securities and Exchange Commission filing that a multibillion-dollar runway and terminal expansion at Philadelphia International Airport could harm its finances and business operations and force it to shift flights elsewhere. The airline, which transports nearly 70 percent of the airport's passengers, included the statement in its 2011 annual report to federal regulators.

■ **Franchise Terminated:** Million Air, a corporate chain of upscale refueling facilities for private jets, terminated its franchise agreement with SBD Properties, LLC, a firm managed by

Lift-A-Loft Announces New Ownership

Lift-A-Loft was acquired in January by Todd Hunt, a veteran to equipment manufacturing and marketing. He spent several years as COO of a holding company with 10 separate operating units.

New ownership is now in the process of making strategic investments so that the company can be more effective and take advantage of opportunities to compete for new business.

"The company is off to a good start for 2012 and we expect to make significant strides to increase sales and profit levels in the coming years," said Hunt. "You will definitely see some exciting new developments from Lift-A-Loft."

a controversial developer who began operating a franchise at San Bernardino International Airport in 2010.

■ **Bankrupt AMR Posts Loss:** The parent company of American Airlines reported a net loss of \$1.98 billion for 2011. In other news, American reported that it could not afford to offer early-retirement incentives to unionized mechanics and flights attendants. The airline also reported a loss of \$170 million in January.

'Airports, Inc.' Contributes \$1.2 Trillion To Economy

A new study released by the Airports Council International-North America shows that America's commercial airports generate 10.5 million jobs and contribute \$1.2 trillion to the nation's economy.

The Economic Impact of Commercial Airports in 2010 quantifies the contributions of 490 commercial airports in the United States, dubbed "Airports, Inc." The analysis, prepared by CDM Smith, concludes that in addition to the broader

impacts, airports also are powerful economic multipliers in communities and states nationwide.

The annual payroll associated with airports - \$365 billion - is comparable to the economy of Michigan.

■ **IATA Reports January Traffic:** The International Air Transport Association announced global traffic results for January showing a 5.7 percent rise in passenger demand but an 8 percent decline in air freight compared to the same month in 2011. The occurrence of Chinese New Year in January (rather than in February as in 2011) exaggerated the increase in passenger demand and the fall in air freight.

Flightcom Partners With Asian Rep

Flightcom Corporation announced a partnership with Air-Tec Marketing, authorizing the reseller to provide Flightcom's wired and wireless aviation ground support communication ground support systems for pushback and maintenance operations to its customers in Asia.

Air-Tec Marketing distributes a broad range of quality aircraft ground support equipment for military, corporate and commercial airlines and will now offer, sell and support Flightcom's aviation solutions in Singapore, Malaysia, Indonesia and other countries in the Asia region.

The rep firm has been serving airlines, handling agents, airports, aircraft operators and military since 1994.

■ **Delta Defends Record:** More pets died on Delta Air Lines than on any other carrier last year, according to data released by the federal government. Out of 35 pets that died on airlines last year, 19 died on Delta flights. That's up from 16 the previous year. Delta said it carries more pets than many other airlines, in part because of its broad route network.

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U.S. Weighs EU Carbon Actions

Reuters reported last month that the United States is still considering how to respond to the European Union law forcing airlines to pay for greenhouse gas emissions. The array of potential steps

include barring national airlines from participating in the EU program, lodging a formal complaint with the International Civil Aviation Organization, ceasing talks with European carriers on new routes

and imposing retaliatory levies on EU airlines. An analyst with Barclays Capital pegged the cost to airlines as more than \$391 million this year.

■ **Eaton Seals On Mars Rover:** Eaton's aerospace facility in Beltsville, MD, provided specially manufactured seals for the Mars Science Laboratory spacecraft that launched in November 2011. Named "Curiosity," the nuclear-powered rover is expected to reach the Red Planet in August.

■ **Southwest Takes A Break:** Southwest Airlines is pausing in its expansion plans, as the carrier grapples with the high price of fuel and its acquisition of AirTran Airways. CEO Gary

Kelly told the *Wall Street Journal* that he sees opportunities to eventually add "hundreds of planes" to Southwest's fleet, but plans to keep the fleet at 700 planes this year.

■ **Court Orders Strike's End:** A German labor court ruled in favor of Frankfurt Airport operator Fraport AG and airline Lufthansa over a strike by the airport's 200 ground workers. The court said the strike violated the country's labor laws.

■ **Concerns Over Fuel:** IATA said 2012 began with no sign of relief in jet fuel prices. After some decline in December 2011, February 2012 has seen jet fuel prices rise 14 percent above levels a year ago.

■ **TIEM Named Company Of The Year:** Toyota's Columbus, IN, manufacturing plant, Toyota Industrial Equipment Mfg., Inc., was recognized as "Company of the Year," by the Columbus Area Chamber of Commerce.



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Partnerships/ Acquisitions/ Contracts

■ Jet Aviation Acquires 14th FBO:

Jet Aviation acquired the Enterprise Jet Center FBO at Hobby Airport in Houston, TX, adding the 14th FBO to its global network of premium aircraft service and support facilities.

■ Jetway Deal: JBT Corporation

announced that its JBT AeroTech business has been awarded a contract in excess of \$5 million for the supply of gate equipment, including 13 Jetway® passenger boarding bridges, to a major airport in the western United States. The installation of the gate equipment anticipated to be completed in the third quarter of this year.

■ Swissport Adds Cargo: Swissport

International begins cargo handling services at Kansai International Airport in cooperation with Finnair Cargo. The global ground handling provider has operated passenger ground handling and ramp services at KIX for several years.

■ ASIG Wins Contract With Spirit:

Aircraft Service International Group was selected as Spirit Airlines' new handler at Los Angeles International Airport. ASIG has already been providing the airline with refueling services at LAX and will now add cabin cleaning and ramp side service for Spirit's six daily flights.

■ **A KLM First:** A joint venture between KLM Royal Dutch Airlines and Kenya Airways will be the first carriers to offer direct cargo service between China and Africa. The round-trip service will be operated twice weekly.

■ **Flightstar Buys Bloomington:** The Flightstar Corp., Savoy, IL, recently purchased the assets of Bloomington Avionics Inc., Bloomington, IL. The staff at Bloomington Avionics, as well as its complete line of overhead and services, will transfer and now operate from Flightstar's FBO at Champaign-Urbana's University of Illinois-Willard Airport.

People In The News





Patrick Fisher joins Flightcom Corporation as its new director of federal programs. Fisher will use his more than three decades of experience providing technology solutions to military and federal agencies to broaden



Flightcom's presence to the government sector.






Schiphol Cargo has appointed **Berend-Jan Rietveld** as its marketing and communications manager. Rietveld will plan and manage global marketing activity including advertising, media


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relations, online, literature production and trade show participation.

Jasper's Top Branch: The Houston, TX, branch of Jasper Engines & Transmissions took home the President's Award for 2011 at the company's annual sales banquet. The award recognizes the company's top branch



Brian Flanagan



Matt Miller



Steve Beltran



David Eschbach



Ken Williamson



Ed Nesbitt

based on various sales and financial figures. In addition, the branch received awards for Most Improved Profits; Most Improved Gas Engine Sales; and Most Improved Marine Sales.

Individually, Houston branch manager, **David Eschbach**, was named Manager of The Year for 2011. Outside sales rep **Brian Flanagan** was recognized for Most Improved Sales Volume. OSR **Matt Miller** ranked as one of Jasper's top five Veteran Sales reps for 2011. OSR **Ed Nesbitt** ranked as one of Jasper's top five Rookie Sales reps for 2011. OSR **Steve Beltran** was recognized as a Bronze Performance Level recipient.

Ranjiv Ramanathan, head of operations for Air India SATS Airport Services accepted the Air Cargo Terminal Operator of the Year Award at last month's Indian Supply Chain & Logistics Summit and Excellence Awards.



Damon Danneker was promoted to director of operations for JetFlite International.

Airlines for America named **Shelley Rubino** to the role of vice president, global government affairs.



Jet Aviation appointed **Gary Dolski** vice president and general manager of the company's MRO and FBO facility in Singapore, and includes responsibility for the Hong Kong and Kuala Lumpur facilities.

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Matheson Flight Extenders specializes in terminal handling and ground support services for the United States Postal Service and other commercial carriers at 16 cities across the United States.

How to ‘Ramp Up’ New Ramp OPERATIONS

Matheson Flight Extenders has long specialized in ground support for the USPS, but is branching out into the commercial sector.

By Steve Smith

Want to work on the ramp for Matheson Flight Extenders? They're an up-and-coming ground handler that definitely wants to expand.

And because they do government work (more on that in a bit), many of their 16 ramp and warehouse operations around the country honor the prevailing wage so you might start out by earning more than a few extra bucks an hour compared to other ground handlers.

Just be prepared for a little more work before you even start work.

"We're strict and demanding," says Tom Tagart, manager, operations and

safety. "But we're not afraid to invest the time in individuals to train them."

Tagart told us the initial selection of the right individual is key. If you make the first cut, the company will conduct a criminal background check, a drug screen and check your personal references.

Then get ready to head to the "gym."

"We have to know whether you are fit enough to do the job," Tagart explains, "so we have a 'functional capacity' test that requires you to lift weights up to 70 pounds."

Sounds reasonable enough. Working on the ramp is tough work.

But you're also going to need brains to go with the brawn.

"Your first day is an eight-hour orientation in which we tell you who we are as a company; what our goals are; and how we measure your performance," Tagart adds.

So now you can get to work, right? Well, yes and no.

"When you do report for duty on the first day, you're placed with a mentor," Tagart says. "You stick with this mentor for the next two weeks." In that time, there will be on-the-job training to learn, for example, how to secure cargo and inspect ULDs.



All images Courtesy of Matheson Flight Extenders

You want to drive a tug? Fine, but plan on another eight-hour day where you'll first review operations and driving manuals, and then get your chance to run an obstacle course.

"We'll start you off with just the tug," Tagart says. "And then we'll add one cart ... and then two carts ... and then three and four. You must prove the ability to maneuver in tight spots. Knock over anything and you wash out."

If you make it, there's more training on pre-work and post-work inspections of the tug. You'll learn to test the brakes, for example, and make sure the hitch is correct. Tagart says all this will likely add up to 16 hours of training.

"We're the little guy that your magazine started out to serve," says Kenneth DeVolpi, station manager at Bradley, CT. "We're trying our best to grow and go up against the big guys."

Now you can get behind the wheel, right? No. You'll ride along with your mentor for a while and then, you finally get the chance to get behind the wheel – but only as long as the mentor is riding alongside to play the role of front-seat driver.

"By the time we do turn you loose on the ramp," Tagart says, "there is a great deal of trust placed on you."

Of course, that's still just the start ... of the start. Slip up and you'll find yourself back in class.

That's a thorough training program considering Matheson Flight Extenders didn't have much of a presence at any airports until 2001 and didn't get what most in the ground support industry would consider a "real" ground handling contract until last summer.

TRUCKING DNA

"Our DNA is in the trucking business," says Paul O'Donnell, vice president of business development.

Matheson Inc., currently based in Sacramento, CA, started out life as R.B. Matheson Trucking Inc. in 1962 and began operations with a single water truck. Two years later, company founders, Robert and Carole Matheson, purchased another trucking company that had two highway contract routes with what turned out to be a very important customer - the United States Postal Service.

Over the next four decades, the company's trucking operation – by this



time named R.B. Matheson Postal Service – was winning contract after contract to transport the mail for the USPS, plus acquiring other fleet operators that were hauling the nation's mail.

Along the way, Matheson went into plenty of other businesses, including no less than selling fire wood.

In 1968, Matheson bought another unusual company with Flight Extenders Inc., a company specializing in aircraft tip tanks. You read that right. A flight extender is a fuel tank typically added to the wing tip of general aviation aircraft.

It wasn't until 1996, through various reorganizations, that Flight Extenders started taking on its current form by providing terminal handling and mail sort operations for the USPS in Phoenix, AZ. A year later, Flight Extenders expanded in Phoenix to provide aircraft ground support operations for the USPS by managing its local CNET operations.

Finally, in 2001 came the big change for Flight Extenders. The USPS

Matheson Flight Extenders won its first international contract last year to provide ground handling services to Asiana Airlines' three weekly cargo flights at Portland, OR.



awarded Flight Extenders with a terminal handling services contract for 13 airport locations, primarily across the Western United States.

“By this time we’d worked for the USPS since 1964,” O’Donnell adds, “Now here we were at or near these airports and we had a chance to do more.”

In 2003, Flight Extenders became the only private contractor to FedEx to

provide aircraft ground support services in Billings, MT. Also that year, its Seattle, WA, operation began providing aircraft support to Northern Air Cargo. By 2004, Alaska Airlines contracted with Flight Extenders to provide terminal handling services also at Seattle.

Between 2004 and 2006, Flight Extenders acquired more contracts with Airborne Express, DHL and UPS for ground support services and

terminal handling services in new cities in the Western United States, as well as Tucson, AZ, to further support the USPS.

THE POST OFFICE?

Set aside the Post Office jokes we’ve all heard. Matheson says doing business with the USPS is a very serious matter.

The USPS constantly measures and grades its business partners on a host of service quality metrics, which, in its own words, “must be reliable and convenient, and must improve continuously.”

“The USPS is a very professional and high-standards partner,” O’Donnell adds. “At a minimum, the USPS expects a performance level of 98.5 percent. We deliver a 99.5 percent level.”

O’Donnell outlined some of those performance measurements for us. Trust us: There are many. But essentially it all means that the mail moves with very little room for mistakes or misunderstandings.

“They’re the kind of customer that you can really learn from,” O’Donnell adds. “Thanks to the USPS business, we’ve really built hyper-efficient systems and trained our people accordingly to deliver great customer service.”

It’s that commitment to quality that helped the company win its first international contract with South Korea’s Asiana Airlines Inc. last year to offer ground handling services to three weekly 747-400 cargo flights at Flight Extenders Portland, OR, facility.

“Asiana is very conscious of its cargo,” O’Donnell says. “We went through a very rigorous process to win the business, and I know that our consistent high marks for service to the USPS is what they liked about us.”

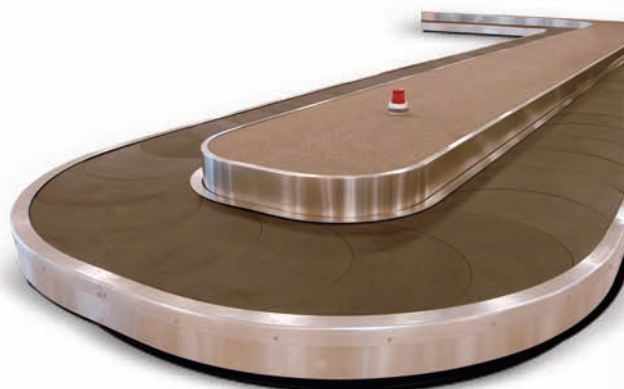
Tagart described what the company did to make sure this new operation got off the ground without a hitch.

“The local manager had a lot of experience with 747 cargo, but not so much with a start-up operation,” Tagart says. “There are a lot of things to consider, and we figure that

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we have about 175 years worth of collective cargo and ramp experience throughout the company.”

So the company had the Seattle manager – experienced in commercial carriers – and the Bradley, CT, manager – experienced in cargo – and the Salt Lake City, UT, manager – experienced in GSE – head to Portland to prep two weeks before the start date.

By the way, we can't write this feature without mentioning that Bradley manager. Kenneth DeVolpi got the ball rolling on our coverage – despite the fact that when we first spoke to him he was literally on his way to the emer-

gency room. Later, we spoke to him as he recuperated on the couch at his parent's home in Dallas, TX.

“We're the little guy that your magazine started out to serve,” he told us. “We're trying our best to grow Flight Extenders even though we're going up against the big guys whose names people know more than ours right now.”

Asiana also operates flights at other Flight Extenders locations. The airlines said at the start that they will evaluate the Portland operation to determine if they will make a switch.

“We have very open lines of communications,” Tagart adds. “We're

“By the time we do turn you loose on the ramp,” says Tom Tagart, manager of operations and safety, “there is a great deal of trust placed on you.”

always talking a lot with our staff about our performance standards – that we want to run efficiently and show a profit on the bottom line.”

For the customer, Tagart says the clear communications extend not to just what they've done right, but also what didn't go according to plans.

“We'll provide them with the corrective action that we'll take to fix it,” he adds.

O'Donnell will also be keeping a sharp eye on the Asiana contract.

“It's great to see that the high-quality systems and service that we've built into our company do translate well and are appreciated in commercial business like Asiana,” O'Donnell says. “We believe there is quite a future for us there to grow.” ■

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Kuala Lumpur International Airport Builds 'Next Generation Hub'

Airport's strategy plans for seamless connectivity between low-cost and full-service carriers.

By Manik Mehta

The Kuala Lumpur International Airport (known officially by IATA as "KUL," but often referred to as "KLIA") has ambitions to become a major aviation hub in Southeast Asia.

Located some 31 miles from Malaysia's capital city of Kuala Lumpur, KLIA got off to a discouraging start. Press accounts of opening day on June 27, 1998, recount planes kept in holding patterns for up to an hour; passengers locked in aircraft for up to three hours because of a breakdown in the aerobridges and aircraft bay allocation system; delays of up to five hours to wait for luggage; queues of up to 30 minutes just to buy a ticket for a taxi; and queues of more than two hours to finally get into a taxi.

What's more, financial crisis, SARS and Avian flu crippled passenger traffic in its first years of operation. The first phase of KLIA, for example, projected 25 million passengers annually, but KLIA only served 13.2 million passengers in its first full year of operation. It didn't reach that 25 million mark until 2007.

KLIA has, nevertheless, since developed into an important traffic point for Southeast Asia. Malaysia Airports Holdings Berhad (MAHB), which manages KLIA and four other of the country's international airports and 16 domestic airports, plans to get a bigger share of that air traffic.

LOW-COST TRAVEL

MAHB, for example, is currently constructing KLIA2, a new terminal

for low-cost carriers (LCCs) to replace its current Low-Cost Carrier Terminal, opened in 2006. MAHB is keen to develop KLIA into a so-called "Next Generation Hub" – a hub airport that will allow for seamless connectivity between low-cost and full-service carriers.

KLIA2 is expected to be completed by spring 2013. The new terminal at 2.6 million square feet will dwarf the current LCCT's 379,850 square feet and accommodate up to 30 million passengers annually with capacity for further expansion of up to 45 million passengers per year. MAHB says it will also invest in the construction of a third runway.

KLIA2 was planned in part to cater to AirAsia, Asia's largest low-fare, no-

KLIA2 will be connected to a satellite terminal by a 900-foot skybridge that planes pass under.





Bashir Ahmad, managing director of Malaysia Airports Holdings Berhad, which manages Kuala Lumpur International Airport.

All photos courtesy of MAHB

frills airline and a pioneer in low-cost travel throughout Asia.

KLIA's current LCCT is AirAsia's largest hub, but that hasn't stopped a war of words between MAHB and the airline's outspoken CEO Tony Fernandes over the terminal's considerable delays and spiraling costs. Those costs have nearly doubled to \$1.2 billion for a terminal that originally was planned to open last September.

Fernandes knows a low price when he sees one. He bought the heavily-indebted airline in 2001 from the Malaysian government for the token sum of less than a dollar at the time (although he assumed about \$11 million in debt, too).

AirAsia has refuted MAHB's contentions over the size, capacity and functionality of the terminal. In particular, AirAsia did not want to have aerobridges built at the gates since it did not want to pay to use them. The budget-minded airline also announced that it had only asked for a semi-automated rather than a fully automated baggage-handling system, and that MAHB had "unilaterally" decided to set up the fully automated system.

Another point of friction was the MAHB's proposal to raise service charges and other airport fees.

Airport taxes are, however, regulated by the government's Transport Ministry, which recently gave MAHB the green light to raise passenger service charges by 28 percent, and aircraft parking and landing charges by 9 and 18 percent, respectively, over three years.

MAHB says its airport charges are still the lowest in the region. The public debate got so heated a few years ago that AirAsia had plans to build its very own airport about 6 miles from KLIA.

Although KLIA2 may have been conceived predominantly for AirAsia, it will also be open to other LCCs eventually operating from the facility, according to Mohamed Sallauddin

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bin Hj. Mat Sah, MAHB's general manager of marketing.

"It's being constructed to cater for the expansion of AirAsia because by the end of 2012, the existing LCCT will handle 15 million passengers," he says. That capacity is far below just this one airline's bullish projections for passenger growth of 45 million by 2020.

And although KLIA2 will cater to LCCs, MAHB maintains that the terminal costs cannot be kept low.

"The new low-cost terminal is not low cost in terms of the services that we offer the airlines and the passengers," says Bashir Ahmad, MAHB's managing director.

Keep in mind that the current LCCT is a glorified warehouse; it was formerly used for cargo purposes and is expect-

ed to revert back to its humble origins when KLIA2 opens. Although MAHB has expanded it twice already, the building does away with amenities and lacked even a rail connection to KLIA's main facilities for several years.

There is still no transfer facility at the LCCT. Passengers who need to make transfers, must clear immigration, collect luggage, then clear customs and make their way to the Main Terminal Building, which by road is 12 miles away, to check in for connecting flights.

This will not be the case with KLIA2. The project, for example,



The airport's cargo traffic declined slightly in 2011 to 738,369 tons. MAHB, however, is confident that it will also attract more cargo traffic.

includes 592,000 feet of retail space. Airport officials also contend that many middle-income people are choosing to travel on LCCs, but expect much more amenities once they land. In other words, building a "high-cost, low-cost" terminal might be a much cheaper way for MAHB to cater to that many more passengers.

"We believe Southeast Asia is a huge untapped hinterland, next to China and India," explains Abdul Nasir Abdul Razak, MAHB's general manager, planning and development.



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An artist rendering of the airport's up-graded KLIA2 terminal, which is expected to open early next year. The terminal is designed for 68 aircraft parking bays.

"When you consider there are 450 million people in Indonesia and only around 3 percent are currently flying, you can see the potential."

Ahmad adds: "The design of the building takes into account input

from all potential airlines. We want to ensure that passengers are comfortable and that the new terminal will provide excellent operational efficiency."

ATTRACTING AIRLINES

With construction of KLIA2 under way, MAHB is now working with its airline partners to explore potential route

expansions to make KLIA an attractive airport in Southeast Asia to other full-service airlines.

Sallaudin says MAHB wants to add new routes to Eastern and Central Europe, as well as attract direct flights to the East Coast of the United States. The country's flagship carrier Malaysia Airlines continues to fly to Los Angeles, but stopped its flights to Newark

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Malaysia Airports Holdings Berhad, KLIA's management company, holds annual safety campaigns at all its airports to instruct ramp workers on how to properly handle ground service equipment.



The current Low-Cost Terminal was built with low-cost travel in mind and did away with most amenities. KLIA2 plans to cater to low-cost carriers, but also attract travelers who may not be so budget-minded.

Liberty International Airport nearly four years ago. Meanwhile, no United States carrier flies to KLIA. Northwest Airlines used to, but stopped the unprofitable flights during the airport's early years of operation.

Total passenger traffic at the country's major airports last year rose 10.6 percent to 65.3 million, up from 59 million passengers in 2010. Of this, international passenger traffic grew 10 percent to 30.9 million passengers in 2011, up from 28 million in 2010.

KLIA received a total of 37.7 million passengers in 2011, up 10.6 percent over the 34 million passengers in 2010.

"Yes, Singapore Changi Airport has strong business traffic, so does Suvarnabhumi Airport in Bangkok,"

Ahmad says. "Our traffic may be lower than Singapore and Bangkok, but we have, nevertheless, been recording good growth. Even as most regions of the world were mired in the economic crisis of 2009, we experienced strong growth."

KLIA has also spent approximately \$39 million to upgrade its facilities to accommodate new generation aircraft. Malaysia Airlines, for example, has already ordered the A380 aircraft while Emirates started operating the A380 to KLIA this past January.

"We can also, of course, accommodate the Dreamliner," Ahmad adds.

In an effort to further develop business, MAHB has created an incentive program for foreign airlines.

"We offer free landing for three years for new airlines," Ahmad says. "We also give monetary benefits based on passenger growth rates." A fully loaded 747, for example, could earn almost \$2,500 based on a top growth rate.

Ahmad adds airlines come to Malaysia "mainly for traffic though the incentive program does provide a nice icing on the cake."

Manik Mehta is a New York-based journalist with extensive experience covering aviation, including ground support, airports, airlines, infrastructure and passenger/cargo traffic. Mehta travels frequently to Europe and Asia. ■



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Little Actions Ensure Safety On The Ramp

'Small' programs add up to big improvements for the health and safety of ground support crews.

By Dr. William Johnson, Chief Scientific & Technical Advisor – Human Factor, FAA

A safe operation is the result of many safety interventions. Compare your organizational aviation safety to human health. Doctors say we must exercise, eat the right foods in the right portions, get proper sleep, avoid too much stress, go for an annual check-up and more. These steps to good health must be combined to help ensure continuing health.

For the past six months I have written *Ground Support Worldwide* articles on such topics as fatigue risk management, professionalism, line operations safety audits, Safety Management Systems and how to calculate a return on safety investments. Each of these topics can have a positive impact to promote safety in your organization.

As in the personal health example, none of these topics stands alone. We must use them collectively to help ensure safety. There are many examples of small programs that add up to ensure your company's "health." That health can definitely be measured in safety, but also in efficiency, profit, employee satisfaction and more. Examples of these programs include the following:

- Training
- Voluntary Reporting And Promoting A "Safe" Culture
- Risk Management
- Line Operations Safety Assessment For The Ramp
- Professional Responsibility Awareness

Let's look at these topics with specific examples:

Training: The FAA worked with a small Miami-based MRO to



Even with extraordinary health or high safety performance, never become overconfident or complacent. One cannot be too healthy or too safe.

deliver fatigue awareness training. Questionnaires delivered before the training, immediately after the training and, then, 90 days later were used to determine worker assessment and training impact.

Immediately after the training the workers felt that they learned a lot and liked the training. The nature of the single-shift plant with minimal overtime meant that the work schedule did not induce schedule-related fatigue.

Workers felt the training reinforced some of their positive sleep habits. Long after the training was over, workers continued to talk about fatigue issues with their peers.

In another fatigue training example, the pre- and post-tests were conducted with airline personnel. There were changes to attitude, knowledge and

behavior. Here are the results six weeks after training:

- 44 percent increased sleep by more than one hour.
- 11 percent took naps to supplement sleep duration.
- 55 percent reduced bad fatigue habits, such as drinking caffeine late in the day.

Voluntary Reporting And Promoting A "Safe" Culture: The push for Safety Management Systems has sensitized management and workers to recognize and report the hazards and even the many mistakes that occur daily. They know that such reports result in new programs or changes in procedures that will prevent repeated errors. A culture that encourages workers to speak up when they see hazards or make mistakes is likely a "safe" culture.

An example of successful voluntary reporting is the FAA Aviation Safety

Action Program (ASAP). It permits workers to report ordinary errors/mistakes without incurring the wrath of the company or the FAA. The system works. Typically, a new ASAP system receives an increasing number of reports each month, especially in the first six months. This is a sign of progress. The errors did not likely increase, but reporting those errors and, thus, promoting a safe culture definitely did.

Line Operations Safety

Assessment For The Ramp: Since the dawn of civilization, workers have taught one another through cooperative work. Line Operations Safety Assessment (LOSA) is a formalized means to observe one another at work. When used properly LOSA identifies both the good and bad work practices as well as hazards. LOSA data can contribute to safety management by identifying risk early – before it becomes an event.

Professional Responsibility

Awareness: Have you ever taken the time to talk with workers about professional responsibility at work? Most aviation workers strive to be professional. They understand that their jobs – at nearly every level – are critical to safety. Given the opportunity, they *will* wear proper uniforms at work. Given the proper education and encouragement, they *will* use personal protective equipment. With proper training and work schedules, they *will* come to work fit for duty.

When companies take professional responsibility, the workers *will* do the same.

COMPLACENT MANAGEMENT

Unfortunately, there's a big threat to all these small steps. Let's say that thanks to a lot of little actions, big things are happening. Event rates are down. All indications are you are running a safe organization.

When the budget is threatened, however, and the safety numbers are high there may be an emerging risk

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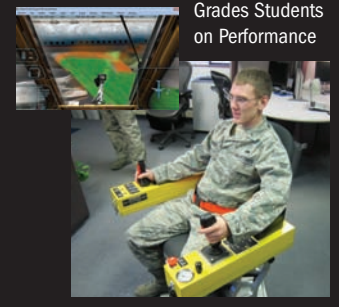
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– complacent management. With cost reduction in mind, your manager may require you to provide detailed justification for each of your safety interventions. Your manager might say: “It’s nice that you trained 10,000 workers on fatigue risk management. Now show me the exact safety improvement.”

You must find the numbers to answer these financial questions. The FAA Return on Investment model may help. (See “How To Prove The Value Of Safety,” *Ground Support Worldwide*, October 2011.)

The article describes an effective, yet easy-to-use ROI tool. To get started, go to www.mxfatigue.com.

Work hard to quantify results, but be careful to balance the time justifying safety vs. the time implementing safety.

‘Little’ Programs Help A Lot To Collect, Analyze And Apply SMS Data

Data Type	Defined	Ways to Collect, Analyze, and Apply the Information	Comments
Reactive	Event is over. Conduct investigation.	Traditional event/accident investigation process.	Learn from the event, Disseminate appropriate information.
Proactive	Looking at present data as always. Elevate the application of this information.	Use audits from the quality, safety, and engineering departments. Rely on key performance indicators. Existing systems can include: CASS, C.A.S.E., ASAP	Improve your methods for capitalizing on this information.
Predictive	Identify the threats early in the process by increased employee involvement	Heavy reliance on voluntary reporting and peer-to-peer assessment. ASAP and LOSA are two examples.	New attention and investment is necessary for successful predictive data collection and use.

Let’s return to the comparison between human health and aviation safety. Overall health comes from a combination of lifestyle decisions. Safety, in turn, comes from a combination of programs and activities.

You must avoid the slippery slope of reducing interventions when the safety numbers are high. You don’t stop eating right and exercising once you are healthy.

An alternative comparison could be more business-oriented. Consider your small interventions as “internal marketing” for safety. Many who have worked in marketing have seen times when a budget reduction caused a company to cancel participation in a trade show, reduce expenses for print and media advertising, cut product offerings and other such actions.

Often it is only a short time before the sales department sees reduced leads, reduced demand and reduced sales. If reduced sales can be compared to reduced safety, you cannot afford to reduce your combination of small interventions that contribute to overall safety.

Even with extraordinary health or high safety performance, never become overconfident or complacent. One cannot be too healthy or too safe.

Dr. William Johnson has spent more than 30 years as senior executive and scientist for engineering companies specializing in technical training and human factors before joining FAA in 2004. He is also an aviation maintenance technician and has been a pilot for more than 45 years. ■

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Closed-Containment Oil Management Systems Reduce Maintenance Costs

The systems are also an affordable green solution that should be discovered and more widely applied throughout the industry.

By Reid H. Erickson, Chairman & CEO, Beneri International Corporation

The concept of closed-containment fluid management has been applied in aviation for decades in the handling, transfer and dispensing of fuels.

Closed-containment systems create a closed-loop sequence of equipment including pumps, hoses and connectors to minimize spillage and risks to ground service personnel while transferring fuels from point A to point B.

These benefits are widely recognized throughout the global aviation industry as it relates to managing fuel to improve safety and

An air-drying filter, quick-disconnect coupler and polyethylene reservoir combine to eliminate condensation problems.



All images from Beneri International Corporation

reduce cost, and yet for the most part, remain interestingly absent when managing oils.

Historically, maintenance personnel purchased oils in quart cans because they were small and easy to handle. The oil would be poured into dispensers, which were manually carried to top off specific systems.

However, as the price of oils increased, the need to reduce costs by purchasing in bulk drove the industry toward developing methods of transferring fluids from those bulk containers into smaller more manageable dispensers.

And yet today, we can still find many servicing facilities using quart cans.

Besides the obvious cost advantages of purchasing in bulk, a host of other problems exist when quart cans are used including:

- Pouring oils increases risk of spillage.
- Residual oils in quart containers increase safety and environmental risks.
- Empty quart cans increase disposal and clean-up cost.
- Seepage, spillage and residual oils all add up to an increased cost of lost oils.
- Use of open containers increases risk of fluid contamination.

In addition to the above problems, aircraft owners were also experiencing an



A compatible hose with a matching coupler is connected to the outflow port and compressed air or nitrogen power is used to transfer the oil from the tote to smaller containers.

unacceptably high rate of mechanical failure involving Constant Speed Drive (CSD) components. Engineers and aircraft maintenance personnel spent years researching the problem and discovered that the CSD failures were the result of oil contamination caused by condensation, which was occurring in metal dispensers or when oils were exposed to outside air and humidity due to the open method of fluid transfer.

The identification and understanding of these problems led to the development of a five-part solution:

- Researching materials and developing oil-dispensing reservoirs (tanks) using a non-conductive, insulating, low density polyethylene material that prevents condensation.



The bung is specially designed to hug the interior. That way even the last quart of oil in a 55-gallon drum can be retrieved.

- Developing and attaching air-drying filters to oil transfer and dispensing equipment to maintain consistent internal drying properties.
- Adapting oil containers and dispensers with quick-disconnect couplers

to create closed-containment fluid transfer capabilities.

- Developing low-cost power sources to move oil through the closed-containment system.
- Designing closed-containment systems with automated controls to improve efficiencies thereby reducing the time it takes to service aircraft.

FluidTran Incorporated (www.fluidtran.com), specializes in the field of closed-containment equipment engineering and system design for the aviation industry. Its oil-dispensing equipment uses a polyethylene reservoir and air filter attachments as standard components that essentially eliminates the condensation problem.

The company went on to redesign its entire oil-dispensing equipment line to improve design flexibility and operational performance, making each standard unit adaptable to multiple accessories such as fluid totalizers, filters and quick-disconnect couplers.

In doing so, the FluidTran dispenser product line became completely compatible with closed-containment designs with the addition of off-the-shelf commercially available accessories. This enables service operations to spread the cost of upgrade over a longer period of time by purchasing compatible equipment to replace outdated, less efficient dispensers and later, purchase the required accessories to integrate the equipment into a closed-containment system.

Closed-Containment System Benefits

- Reduce the cost of oils through bulk purchasing and by eliminating spillage.
- Reduce or eliminate the risk of oil contamination common in open pour systems.
- Save time on service.
- Improve safety.
- Cut down on environmental liabilities and health risks.
- Increase management control of maintenance costs.



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WHERE IT STARTS

Closed-containment systems start at the bulk oil storage containers including either "totes" or 55-gallon drums. Once these bulk containers are delivered and the seal is removed, the buyer owns the oil. Therefore, it is in the best interest of the purchasing company to minimize the cost of lost oils, minimize the risk to employees and eliminate the risk of fluid contamination. Closed-containment is the solution.

Companies recommend a variety of system designs based upon site specific requirements and objectives. In most cases, this equipment has proven to be compatible with existing bulk containers and can be easily retrofitted to reduce the overall capital costs of installation.

To create a closed-containment oil management system from a tote, FluidTran recommends the addition of a filter just beyond the quick-disconnect coupler that attaches to the tote outflow point. A compatible hose with a matching coupler is connected to the outflow port and compressed air or nitrogen power is used to transfer the oil from the tote to smaller containers.

This equipment enables the transfer of oil to go directly into the dispensers. Adding automated measuring and dispensing controls allows for a specific amount of oil to be transferred from the tote to the dispenser through the closed-loop system based upon the dispenser reservoir size.

When oil is delivered in 55-gallon drums, a bung kit and transfer pack products are used to transfer oil from the drum to the dispensers. The bung is specially designed to minimize residual oil left in the drum when emptied.

In both examples described above, the closed-containment components create a closed-loop system and enable the transfer of oils from bulk storage containers without spillage or risk of contamination.

These types of low-tech, relatively low-cost solutions can effectively resolve all the problems previously identified and deliver immediate benefits related to lowering costs and improving safety. And yet, the industry has yet to fully embrace such solutions for managing oils like it has in managing fuels. Why?

There may be a few fundamental reasons:

- Economic conditions forced the downsizing of airline engineering divisions and internal maintenance technicians. The internal technical expertise may simply be missing.
- Financial circumstances removed the purchasing power from most maintenance managers that best understand equipment needs, facility risks and benefits of such solutions.
- Upper management is busy making critical decisions on corporate survival involving multimillion dollar

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A complete closed-containment system: wall-mounted pump; bung kit and dispenser.

inventory, and when receiving proposals for low-tech, low-cost solutions, it is hard for such proposals to gain traction and become a priority.

Small firms were hit hard by the economic downturn. Many of these types of small business solution providers haven't had sufficient resources

to penetrate the corporate veils and industry barriers.

However, in recent months, the industry has shown signs of recovery and should once again be evaluating opportunities to invest in long-term solutions.

FluidTran has also custom designed and developed equipment to resolve specific problems with older, outdated servicing equipment or changing designs. One example is a heavy duty cowl pump/thrust reverser designed to be compatible with closed-containment systems.

As the aviation industry continues to recover, it should recognize that a simple upgrade to equipment designed to apply closed-containment as an integrated oil management system can have an immediate and positive impact by reducing overall maintenance costs and improving sustainability.

Beneri International Corporation is a sustainability consulting company assist-



A heavy-duty cowl pump/thrust reverser is one custom product that can service outdated equipment in conjunction with a closed-containment oil system.

ing industry and government with the identification and application of green technology solutions. Reid Erickson can be contacted at (276) 322-4353 or by email at reidercks@aol.com.

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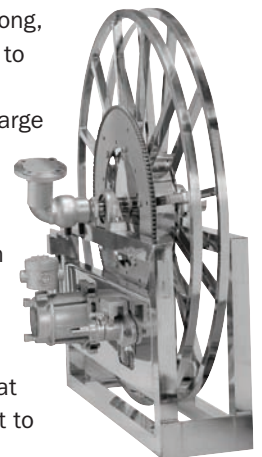
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Eight Fuel Treatment Myths

Have 'bugs' in your tank? Microbial corrosion refers to the damage done by microorganisms that love the inside of fuel tanks.

By Bob Tatnall, Material Engineer, Fuel Right

Over the last few years, the formula of diesel has changed to reduce pollution. Once that occurred the number of issues with sludge and corrosion in tanks and engines has significantly increased. While not all are affected, the ones that do get the combination of "the bug" and a little water are experiencing real problems. Here are several myths to consider:

MYTH 1: Good Fuel Quality Will Prevent Problems

Any grade of diesel is almost always of excellent quality when it leaves the refinery. The problem is that contamination happens during storage and transport – and this contamination is the source of many of our fuel system problems. Water (condensation and leakage) combines with common bacteria (which come with the water) to make sludge and biofilms.

MYTH 2: Biocides Will Sterilize The Fuel And Prevent Problems

Bacteria that form sludge and corrosive deposits are difficult to control with biocides. Sometimes using a

biocide triggers a reaction known as "mucooid stage" (i.e. "sludge formation on steroids"), and there even are cases where bacteria have been able to convert the biocide to a "food" that promotes growth.

MYTH 3: Unstable Fuel Is The Problem

Fuel stability was a legitimate issue in yesterday's high-sulfur fuels. Today's ultralow sulfur diesel, however, is almost always rock-solid stable, and chemical stabilizers would be a waste of money. Most common additives that say they stabilize fuel do not work at all against this particular problem.

MYTH 4: Biodiesel Cleans Sludge Out Of Diesel Systems

Actually, sludge grows faster in biodiesel than in straight petrodiesel. If you have been using a sludge-control additive and it seems to have been working, you might have to use a higher dose rate with biodiesel to get similar results.

Myth 5: New Equipment Doesn't Need Treatment

Fuel contamination is a random and unpredictable phenomenon. Some old systems are still clean and have no apparent sludge or fouling issues. When fuel is contaminated, however, problems can start with the first fill.

MYTH 6: Corrosion Is Not A Problem In Diesel Systems

In fact, corrosion associated with biofilms in ULSD sys-

tems has become such a big problem that the petroleum industry has asked the American Society for Testing and Materials to form a task force to study the causes and develop solutions.

MYTH 7: Kerosene Blending Is the Perfect Answer To Winter

By diluting the paraffin content of diesel fuel, kerosene blending will reduce the temperature at which waxing of filters and gelling of fuels occurs. However, kerosene also reduces the lubricity of ULSD, which is already a poor lubricating fuel – and the result can be accelerated wear of pumps and injectors.

Myth 8: Alcohols Should Be Used To Remove Water

How long have we been using "dry-gas" (isopropyl alcohol) in the winter? While it's true that alcohols can increase the solubility of water in fuel under certain conditions, this is not a good way to deal with water in fuel.:

- Alcohol does *not* remove significant quantities of free water from fuel tanks.
- Water is corrosive to steel (i.e., rust), but an alcohol/water mixture is even more corrosive to steel.
- Alcohols are often good "food" for bacteria and other troublesome microorganisms.
- Alcohols can cause swelling and breakdown of gasket and seal materials.

Bob Tatnall spent 28 years at DuPont as a materials engineer solving corrosion and sludge issues in industrial applications, Tatnall has spent 16 years solving sludge and corrosion issues in diesel applications.



Photo Courtesy of Fuel Right

Microorganisms can wreak havoc just as much as old-fashioned "rust."

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One of the Malabar rapid deployment jacks assembled and in use at a training exercise.

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