DELAWARE RIVER AND BAY AUTHORITY

2018

Annual Report

Celebrating the 50th Anniversary of the Twin Span
Twin Span opening day 1968: Vice President Humphrey delivered the keynote address.
# TABLE OF CONTENTS

## INTRODUCTION
- Message from the Chairman and Vice Chairman 5

## 2018 OVERVIEW
- Twin Span 50th Anniversary 6
- Twin Span, Then and Now Photos 8
- Fraternal Twins Only 10
- Board of Directors 12
- DRBA People 14
- Services We Provide 16

## OUR YEAR
- Delaware Memorial Bridge 18
- Cape May-Lewes Ferry 22
- DRBA's Regional Airports 24
- DRBA Police 26
- Employee Activities 27
- Employee Achievements 28

## FACTS
- About the Twin Span 30
- By the Numbers 31
Message from THE COMMISSION.

TWIN SPAN TOWER CONSTRUCTION:

The Twin Span's towers, engineered to match those of the original span, are exact in appearance yet hold many unnoticed differences.
To our Governors, Legislators and neighbors in the Delaware Valley,

This year, 2018, the Authority celebrated the 50th anniversary of the completion of the construction project that turned the Delaware Memorial Bridge into the Twin Spans.

While the golden anniversary celebration afforded us the opportunity to look back fondly at our history, it also gave us a firm basis for planning for the future. In addition, it is important for us, and our customers, to remember and appreciate that the revenue that has been generated by the Twin Spans in the last 50 years has been used in a myriad of ways to improve the life of the people of the Delaware River and Bay region. We are proud of what we accomplished in the past, where we are today, and our plans for the future. We are delighted to share in this report some of the events that helped shape our past year.

The year 2018 was a productive one. We dedicated the Gold Star Families Memorial at the Delaware Memorial Bridge Veterans Park. We encourage you to first read about the memorial and its dedication, and then visit our beautiful park and this newest memorial recognizing the family sacrifices of our war heroes.

The people who help deliver the transportation programs of the Authority also deserve recognition. We welcomed two new commissioners this year; we celebrated the selection of our police administrator to the national police accrediting organization; we applauded the first all female pilothouse crew ever on our ferry service last spring; and we greeted the selection of a new deputy executive director early in the year. The good people who choose to work with the Authority make a positive difference in everything we do.

In addition, we welcomed special people and exciting events to our facilities; and we worked hard to keep those facilities in top condition for the safety of the public and our employees. There is so much more to celebrate. Please read all about our exciting year in the report that follows.

“The good people who choose to work with the Authority make a positive difference
We are truly proud to be associated with an organization that cares about its mission and works hard to deliver on its goals. On behalf of the entire commission, we welcome you to our continuing story.

Sincerely,

William E. Lawe & James N. Hogan
Chairman and Vice Chairman of the Delaware River and Bay Authority
The 1968 DRBA Commission

TWIN SPAN
GOLDEN ANNIVERSARY.

Our vision.

At the very first meeting of the DRBA Commission, the Commissioners directed that an application be made for federal approval of a new bridge to complement the Delaware Memorial Bridge. Construction moved rapidly after the ground-breaking in mid-
Studies quickly found that the best, most efficient, and least costly plan would be to build a second span parallel and adjacent to the original Delaware Memorial Bridge. The commissioners were empowered to put the financial power of the Authority’s toll revenues behind the new project. The new bridge had the blessing of the governors of both Delaware and New Jersey and the project proceeded rapidly.

By January 1964 engineering firms, with federal permits in hand, were at work. In April 1964 the Authority authorized a $103 million bond issue that earmarked $70 million for the twin bridge, $112 million to redeem the remaining amount from the original bridge bonds and resources to establish the Cape May-Lewes Ferry.

1964 to the fall of 1968 when the second span was completed. Dignitaries from both states joined U.S. Vice President Hubert H. Humphrey and both governors for the ceremony dedicating the Twin Span. More than 5,000 invitations were sent out for the event.

The second bridge appears to the eye to be a twin of the original but there are subtle differences in the design and construction techniques. Although not identical twins, to the motoring public, the spans look the same. The second one doubled the Delaware Memorial Bridge to eight lanes, capable of handling the increases in traffic that were speeding toward the structures faster than the rosier estimate.
Our mission.

The river’s flow is timeless. High above the water, the traffic flow across the Delaware Memorial Bridge’s Twin Spans seems endless too.
The first bridge had been in operation for more than 17 years when the twin span went into service. Three days after the opening of the second, the first was closed for a major overhaul, including replacement of the entire deck surface, lighting improvements, and other updates.

The work went quickly and it was slightly more than a year later that the ribbon was cut on the rehabilitated first structure.

In the ensuing years, bridge traffic steadily increased, set back only by the gasoline crisis of the 1970s and recession earlier in this century.

In 1992, the bridge converted to a one-way toll system and in 2001 the Authority went live with E-ZPass. Today, more than 70 percent of the traffic crossing the Twin Spans uses E-ZPass. In December 2012, the one billionth customer drove across the span from New Jersey to Delaware. On September 19, 2018 the Delaware River and Bay Authority celebrated the Twin Spans’ 50 years of service.

Day by day, month by month, the traffic total mounts as the Twin Spans link our two great states, strengthen their economies through efficient transportation, and join their citizens in a common community of interest on both banks of the Delaware River and Bay.
THE TWIN SPAN
THEN AND NOW.

The original dedication and the 50th anniversary of that ceremony mirrored each other in some ways, as shown in the photos on these two pages, but like the two spans, were not identical.
At top left opposite page, workers spin cables for the new span. In the twin photo, workers examine cables for the cable dehumidification project.

At middle left, opposite page, the 1968 car parade across the new bridge is led by motorcycles. In the anniversary photo, 20 vintage cars line up in preparation for the trip across the twin span.

At bottom left, opposite page, William Miller, the DRBA executive director in 1968, is profiled while looking at plans for the twin spans. At right, in 2018, Mr. Miller is honored
for his role in seeing the twin span project to completion.

At top, an inset photo shows the revised roadway network necessary to accommodate the second span. The top photo is a recent portrait of the Delaware Memorial Bridge and its approaches.

Above right, New Jersey Governor William J. Hughes and Delaware Governor Charles L. Terry Jr. flank U.S. Vice President Hubert H. Humphrey on the new bridge. In the bottom photo, DRBA Executive Director Thomas J. Cook and New Jersey Congressman Frank LoBiondo flank speaker Delaware Governor John Carney during the anniversary ceremony.
FRATERNAL TWINS.

For all practical purposes, the two spans of the Delaware Memorial Bridge are twins. But in fact, although alike, they are not identical. They look similar from a distance, each a suspension bridge with Norman styled arches. But the devil is in the details for these engineering marvels.

The second bridge
The top photo shows the cable suspension ropes in place in 1967. The bottom photo is the main cable spining operation on the Delaware-side anchorage.

It is only in the style of architecture and the length of the suspension of the main and side spans that the bridges are alike.

The first span had two lanes in each direction, separated by a divider. The lighting, considered old fashioned in 1968, would be changed when the first span was closed for rehabilitation.

Overall, the new bridge was heavier than the original. The average weight per foot on the main span was 10,900 pounds while on the second span in the same area, the weight per foot was 14,000 pounds.

The maximum pull on one cable on the first bridge was about 17,868 million pounds; on the second bridge, it was more: 21,788 million pounds.

There were also significant differences in the design of the substructures of the two spans. The piers for the towers and for the New Jersey anchorage of the second bridge. It measured 246 feet by 1,106 feet by 30 feet thick. It totalled 27,500 cubic yards of concrete and it took 14 days of continuous operations.

The previous record had been made by the 7 1/2 day pour on the New Jersey anchorage in 1948.

In the original span, each cable contained 8,284 parallel wires, each 0.196 inches in diameter, wrapped together to form an outside diameter of 19 3/4 inches. For the second bridge each cable contained 9,196 parallel wires, each 0.196 inches in diameter, wrapped together to form an outside diameter of 20 11/16 inches.

Some other differences, with the original bridge’s data listed first: earth embankments 900,000 cubic yards vs. 993,000 cubic yards; cement, 437,000 barrels vs. 475,000 barrels; concrete,
anchorages in the original bridge were built on large blocks of concrete resting on stable ground far below the bottom of the river.

In the twin span, steel H piles with relatively small concrete caps were used for the Delaware anchorage and both tower piers. The New Jersey anchorage was a soil bearing foundation like that used in the original structure. In fact, the largest continuous underwater concrete pour in the world at that time was used 291,500 cubic yards vs. 293,000 cubic yards; reinforcing steel 5,700 tons vs. 10,000 tons; structural steel 43,000 tons vs. 52,000 tons; wire in cables, 12,600 miles or 3,360 tons vs 14,200 miles or 3,800 tons; pavement on structure 47,500 square yards vs 68,500 square yards; and finally piles under piers, 231,300 linear feet vs. 593,700 linear feet.

So you see they are twins, but definitely not identical.
2018 DELAWARE
Board Members.

WILLIAM LOWE III
Lewes, Delaware

CRYSTAL CAREY ESQ.
Dover, Delaware

HENRY DECKER
Dover, Delaware
2018 NEW JERSEY Board Members.

JAMES HOGAN  
*Franklinville, New Jersey*

JAMES BENNETT  
*Sea Isle City, New Jersey*

SHEILA McCANN  
*Upper Deerfield, New Jersey*
EARL RANSOME  
Pedricktown, New Jersey

CEIL SMITH  
Salem, New Jersey

SHIRLEY WILSON  
Seaville, New Jersey
DRBA PEOPLE.

*Striving to make a difference every day, the people of the DRBA serve the residents of the Delaware River and Bay region.*

RICHARD ARROYO

**DRBA Police Administrator**

The Commission on Accreditation for Law Enforcement Agencies, Inc. (CALEA), selected Col. Arroyo as a Commissioner on CALEA’s governing body in October. Arroyo will serve a three year term on the 21 member, all volunteer commission. The DRBA’s police leader had served as the Director of the New Jersey State Park Police for five years and also was with the New Jersey State Police, retiring as Lt. Colonel following 26 years of service.

HISTORY MADE AT THE DRBA

Three female employees of the Cape May-Lewes Ferry—Meghan D. Palmer of North Cape May, and Melissa Velli and Sharon Lyn Urban both of Cape May—were promoted to the rank of Pilot in 2018. The three began their careers with the ferry system as ordinary seamen. They progressed through the ranks with training, education, and experience to the position of deck officers. All three are well-respected marine professionals and are proven leaders. On April 19, 2018 the first all-female pilothouse crew set sail aboard the MV Delaware. Pictured from left to right above are Pilot Velli, Helmsman Paulette Nickels, and Captain Urban, on that groundbreaking day. Capt. Urban is the second woman to captain a CMLF vessel. She followed in the footsteps of Captain Linda Douglas who captained a CMLF ferry in the 1990s.

Pilot Meghan Palmer

Named to CMLF Board
Commissioner Honored

In an October 10th ceremony, the West Cape May African American Historical Society honored DRBA Commissioner Shirley (Becki) Wilson for her family’s support of the West Cape May and Cape May communities. At left are Society President Vivian Wright Lockett, Commissioner Wilson, and Cape May County Freeholder Marie Hayes.

Named to GVCVB Board

In September John Sarro (at right), Manager of Airport Marketing, Grants and Cultural Affairs for the Authority, was tapped to serve a three-year term as a Director of the Greater Wilmington Convention and Visitors Bureau (GVCVB). The Board promotes the cultural heritage, history, and tourism of New Castle County.
Services
WE PROVIDE.

DELAWARE MEMORIAL BRIDGE
Together the two spans of the Delaware Memorial Bridge provide a vital transportation link between Delaware and New Jersey and for the entire Eastern Seaboard.

CAPE MAY-LEWES FERRY
The three ferry vessels of the Cape May-Lewes Ferry provide both transportation between the two states, as well as entertainment venues for the citizens of the Delaware Valley.

REGIONAL AIRPORTS
Five regional airports are an important part of the Delaware River and Bay Authority’s transportation network. Three of the airports are in Delaware and two are located in New Jersey.

Services include:

- E-ZPass
- Acrophobia escorts
- Emergency roadside services

Services include:

- Free parking at both terminals
- Food service on all vessels
- Facility rentals available

Services include:

- Operations
- Maintenance and security
- Property management and economic development opportunities
DRBA POLICE

The Delaware River and Bay Authority Police Department is committed to public service, crime prevention, homeland security, and highway safety. As a CALEA Accredited agency, officers are dedicated to protecting and serving patrons, the Authority, and its employees.

Services include:
- Crime prevention
- Homeland security training
- Highway safety

EMPLOYEE ACTIVITIES

In addition to their positions within the Authority, DRBA employees pursue a number of volunteers interests both inside and outside of the agency. In both their employment and volunteerism, they provide vital services to the people of the Delaware River and Bay region.

Services include:
- Education and training
- Awards recognition
- Community involvement

SUMMER INTERN PROGRAM

For the sixth consecutive year, the DRBA offered a 10-week paid internship program to university and college students. The program offers a number of opportunities for these students to experience a professional work environment.

Services include:
- On-the-job-training
- Cross functional team work
- Group activities
Delaware Memorial Bridge.

First, before any other consideration, comes the safety of the Twin Spans. Only after that is ensured do we turn our attention to events and activities centered around our iconic bridge.

This year we celebrated the 50th anniversary of the second span of the Delaware Memorial Bridge.

The Delaware Memorial Bridge may be aging gracefully, but it is in fact facing challenges related to use, condition, and operating environment. The first span opened in 1951 and the second one in 1968; millions of users have crossed our beautiful twin spans in the years since the openings.

As a result, the Authority is entering the sixth year of a ten year long overhaul.

In 2018 one of the interesting projects undertaken was repairing expansion joints on the bridges. The work had to be carried out while maintaining traffic. The carefully orchestrated work required that two lanes on the bridge close at 8 p.m., followed by a third lane closure at 9 p.m., leaving only one traffic lane and an adjacent lane. Each night’s work was finished by the morning rush hour. It took excellent planning and attention to detail to keep traffic rolling while this vital work was done. Why was it so important? Expansion joints are often one of the first components of a bridge deck to fail, so keeping them strong is vital to maintaining the integrity of the entire structure.

In June the Authority and the University of Delaware (UD) collaborated on a project to evaluate the strength limits for in-service bridges. Using a decommissioned steel bridge from the I-295 southbound project, the University destructively tested the structure to learn how to evaluate the performance of actual structures in our region. The field testing validates and enhances our engineering capabilities.

During the next five years, we plan to invest more than $400 million in our transportation facilities, primarily at the Bridge. Among the many projects remaining in this overhaul are a ship collision protection system, suspender rope (vertical cable) replacement, major steelwork repairs, paint removal and recoating, and a bridge deck repair.

All of these projects are necessary to ensure public safety and uninterrupted traffic flow. An approaching toll increase will allow us to continue this necessary work without
keeping our bridge available to the public.

In addition to keeping the bridges functional, we also consider the adjacent roadways that lead to and from the Twin Spans. Early in the year, the Authority’s contractor installed structural steel related to the I-295 SB Reconstruction Project west of the Toll Plaza. The new steel beams were placed on the I-295 SB overpass. When highway work is completed, the Authority will have invested more than $90 million to improving the region’s infrastructure.

At the 50th Anniversary celebration, Congressman LoBiondo said “The critical role the Delaware Memorial Bridge plays in the daily lives of South Jersey residents and New Jersey’s economy cannot be overstated.” This was never more evident than during a 7-hour emergency closure of both spans on Thanksgiving weekend Sunday due to a gas leak at a nearby chemical production plant. Without our bridge available to the heavy holiday traffic, the resulting clogged highways made travel in the region nearly impossible.
Delaware Memorial Bridge.

The Gold Star Families of Delaware raised the money for this stunning memorial which was dedicated after the Veteran’s Day Service at the DMB Veterans Memorial Park.

The reverse side of the monument tells a story through the four granite panels entitled: Homeland, Family, Patriot, and Sacrifice.

The Gold Star Families of Delaware representative and officials with the Hershel “Woody” Williams Medal of Honor Foundation broke ground for a Gold Star Families Memorial Monument at the Delaware River and Bay Authority’s Veterans Memorial Park in New Castle, Del., on April 26, 2018.

who have sacrificed a loved one for our freedom. The reverse side tells a story through the four granite panels entitled: Homeland, Family, Patriot, and Sacrifice.

The Hershel “Woody” Williams Medal of Honor Foundation created the Monument in honor of families who have sacrificed one of their loved ones for our freedom.
Above In April, representatives of the Gold Star Families of Delaware and the Hershel “Woody” Williams Medal of Honor Foundation broke ground for a new memorial at the DRBA’s Veterans Memorial Park.

Delaware on April 8, 2018.

The completed memorial, which was dedicated at the annual Veteran’s Day Service at the War Memorial, is a stunning black granite monument with two sides of remembrances.

One side bears the words: Gold Star Families Memorial Monument, a tribute to Mothers, Fathers, and Gold Star Families to remember those families whose loved ones have made the ultimate sacrifice. The Gold Star Families of Delaware raised the $40,000 to build and install the monument.

In addition to donating the land for the new memorial, the Authority will landscape and maintain the site in perpetuity as its contribution to the project.
The Delaware Memorial Bridge is dedicated to the men and women of Delaware and New Jersey who lost their lives in service to our country.

The Authority’s Veterans Memorial Park near the DRBA’s headquarters complex continues the tradition of honoring those who have served the country in wars, both declared and undeclared.

_Elected officials including Senator Carper, Senator Coons, and Congresswoman Blunt-Rochester spoke at the service._

The Authority’s dedication to remembering those who served has included both a Memorial Day and a Veteran’s Day Service at the Memorial site. This year, 2018, the Veterans Day Service was an extraordinary event, as it took place on the 100th anniversary of Armistice Day which marked the end of World War I.

One veteran, Lt. Commander James J. “J.J.” Connell, was honored at this year’s service. Connell was a Salesianum alumni from Wilmington, a 1961 Naval Academy graduate who made the ultimate sacrifice in a prisoner of war camp in North Vietnam. Recognizing Connell’s sacrifice, Governor John Carney presented Connell’s widow with the Order of the First State, the highest honor that the Governor can bestow on a Delawarean. The special keynote speaker was retired Air Force Col. Murphy Neal Jones, who flew in the 1953 Memorial Day air show.

[At left]
Governor Carney presents the Order of the First State to Connell’s widow, Jenny Connell Robertson.

[Below]
DRBA Deputy Executive Director paid tribute to our region’s Veterans for their service to our country.
like Connell, spent more than four years as a POW.

At the conclusion of the remarks, other elected leaders, veterans organizations and state officials paid tribute to the veterans.

Above Numerous public safety organizations in both states volunteered to assist with traffic control at the second Run to Acceptance held on the Twin Spans on September 30. Beginning at 7:00 a.m. three of the northbound lanes of the DMB closed to allow 189 men and women to take part in a 5K run to support Special Olympics Delaware.
Cape May-Lewes Ferry.

It was an exciting year in which we welcomed back one of our ferry vessels from a four-month drydocking and caught a potentially serious problem with another vessel. We welcomed annual events and bid a final farewell to a former vessel from our fleet.

Keeping our fleet in efficient, effective and safe condition and ensuring the safety of our passengers and employees are the Cape May-Lewes Ferry’s primary missions.

We welcomed our MV New Jersey back to her home harbor after an extended stay at a New York shipyard. The vessel returned to us in shipshape condition, sporting a new HVAC system and rebuilt service generators. Our on-the-spot crew in Brooklyn created the daily production schedule for the shipyard and worked hard to subtract days from the New Jersey’s time in drydock. It was a successful stay and our crews welcomed her back to the Bay.

With the New Jersey away, it was not good news when Chief Engineer Bob Greenling discovered an issue with the Ship’s Service Diesel Generator aboard the MV Delaware in April. Chief Greenling took the unit off-line and began trouble-shooting while the vessel made her way to Lewes. When the vessel returned to Cape May, the crew all worked together to determine a solution as quickly as possible. Hours later, it was discovered that operations, so the scuttling of the vessel was a bittersweet finale to the life of a once great vessel, the MV Twin Capes.

In October, our dedication to the environment was recognized when the New Jersey Department of Environmental Protection named the Cape May Ferry Terminal operation a 2018 Rising Star for its recycling excellence.

The Ferry service loves to share its facilities with local organizations. This year, for instance, On the Rocks, partnered with Tito’s Handmade Vodka to support a charity of OTR’s choice. Together the partnership raised $2,500 for the United Way.

In addition the Ferry welcomed back the Escape the Cape Weekend. More than 2,300 participants joined us for the 6th annual event. Just as in previous events, all races began aboard a Cape May-Lewes Ferry vessel in the Delaware Bay. In June, the Lewes Terminal hosted the fourth annual Beebe Beach Bash, which benefited Beebe Medical Center’s Emergency Department in
a part worth just pennies was the source of the problem. In just 19 hours, the generator was back together and running normally. The Vessel Maintenance gang did not stop working until repairs were completed and the Delaware was back in service.

In the most unusual and bittersweet event of the year, we watched one of our former ferry vessels slip under the waters of the Atlantic Ocean to become part of the Del-Jersey-Land Inshore artificial reef project. The health of the environment is vital to us and our a truly memorable event.

It was equally exciting when the Schooner A.J. Meerwald, New Jersey’s official Tall ship, spent a month at the Cape May Terminal hosting numerous special events and sailings.

Opposite page: Participants prepare to jump from the Ferry into the waters of the Bay for the Escape the Cape competition. Participant No. 691 is DRBA employee Chris D’Anjolell.
DRBA Airports.

A successful year.

Despite wild weather thrown at our facilities, our maintenance and operations crews kept our runways open.

The photo above shows the equipment and personnel that was required to keep Wilmington-New Castle Airport open during a tumultuous Nor’easter in March.

Our airports experienced some exciting times during 2018 courtesy of Mother Nature. We also worked to update and improve our facilities following a major Nor’easter last March. During the height of the storm, white out conditions prevailed with several inches of snow falling per hour. As conditions worsened in the region, several neighboring airports closed. It was through the hard work of Airport Maintenance and Operations Department that ILG remained open. The men and women were fighting to shelter during this event which featured repeated lightning strikes and high winds. Additionally, the storm knocked out multiple runway lights which our crews repaired after the storm moved on.

The Wilmington-New Castle Airport hosted a quarterly meeting of the Delaware Valley Regional Planning Commission.
improve the facilities at our five airports.

We continued runway rehabilitation work at Millville Airport in New Jersey. The project includes the rehabilitation of Runway 10-28 pavement, lighting and signage systems. The existing lighting and signage was replaced with new lights and LED signs. During the construction the runway was closed.

Our workers at Wilmington-New Castle Airport (ILG) proved their value during April. The team was able to get a priority flight out from the Atlantic Aviation complex, providing a path for the jet to taxi to the Blast Pad for de-icing. During the de-icing process, the roll-over plows and snow blowers cleared ILG’s primary runway and the plane was able to depart for Las Vegas, despite near white out conditions.

In addition, in late July, a powerful, wind-packed storm rolled through Millville Executive Airport, damaging two planes. Fortunately, our personnel had wisely moved all vehicles to the center of the parking lot, keeping them out of harm’s way. As a result, no significant damage was suffered, and the airport was able to remain operational.

Delaware Valley Regional Planning Commission’s Aviation Committee in September. Freight and aviation planning are critical to the region’s position within the global economy.

A single engine aircraft crashed shortly after takeoff from Cape May County Airport in November. Luckily, the pilot suffered only minor injuries.
DRBA Police.

The DRBA Police Department is a reliable and vital presence throughout the Authority.

Officers are dedicated to protecting and serving patrons, the Authority and its employees.

The highlight of the year in the Police Department was the appointment of the DRBA Police Administrator, Colonel Richard Arroyo, to the board of the Commission on Accreditation for Law Enforcement Agencies, Inc (CALEA). In 2017, the Department had won CALEA accreditation for the seventh consecutive time with 100% compliance.

The Authority’s Police Department is committed to public service, crime prevention, homeland security, and highway safety. As a CALEA Accredited agency, officers are dedicated to protecting and serving patrons, the Authority, and its employees. The Authority police define their responsibilities in a number of ways.

For instance in March, off duty officers took part in the 1st Annual Public Safety basketball Tournament at Wilmington PAL. Donations for the event go to survivors/families of fallen officers in Delaware. In May officers attended the annual Law Enforcement Memorial Service in Dover, Delaware honoring those officers who died during service to their respective agencies. And in October the police department participated in the
Top
DRBA police officers attended the annual law enforcement memorial service.

At right
Department police representatives joined members of the DRBA maintenance department at the Castle Hill Elementary School outing. Mascot Officer Spanz stole the show.

In June, the Authority welcomed six new officers to the Department. Col. Arroyo administered the Police Oath of Office to Kathryn Bennett, Michael Efonis, Jay Gersil, Stanley Kite, Domenica Trace, and Matthew Wasko. (See middle photo at left)
Employee ACTIVITIES.

Dedicated, creative, loyal and involved.

DRBA employees do so much more than their jobs. They are also deeply involved in their communities which carries over to the workplace. For instance the effort of just one employee led to Authority-wide collection boxes for a woman’s support house in Wilmington.

Partnering with the U.S. Coast Guard and other groups, the DRBA celebrated World Environment Day 2018 at both the bridge and the Cape May Ferry Terminal in June.

In April our employees “brought their daughters and sons to work” for the day. Our employees show their children the value of their education, helping them discover the power and possibilities associated with a balanced work and family life. The photo below shows one such group.

Many DRBA employees participated in the year’s United Way Campaign. According to

was raised to support and help individuals, families and organizations across the region. Participation was more than double of that of just two years ago.

FerryVision, a joint effort of VATv and the Ferry marketing team, earned two national awards in 2018. The two were the Telly Award for excellence in video and a Silver Magellan Award for In Destination Marketing. The FerryVision team is shown at the top of this page. Accepting the award on behalf of the Ferry is Rhona Bronson, at far right. Rhona is a CMLF employee.

Top right
DRBA employees took part in a wreath ceremony at the center span during the anniversary celebration.

Bottom right
From left, Ferry Chief Engineers Bill Harner (Ret.), Mike Stocko, and Bob Greenling participated in the Escape the
the campaign committee, more than $14,000 Cape competition.
Employee

ACHIEVEMENTS.

On Oct. 19, the Authority held its annual Employee Service and Recognition Banquet in Atlantic City. Response to this year’s event was outstanding, with more than 30 nominations by employees of more than 100 of their colleagues in five categories.

OPERATIONAL EXCELLENCE
During a vessel crossing in April, the MV Delaware experienced problems with a diesel generator and was pulled off the run for emergency repairs. For 19 straight hours, this team got the vessel back in operation for the next day’s early morning departure: Above: David Fehrle, Daniel Hockaday, Ralph Mogavero, Robert Greenling, Evan Hansen, Nicholas Martin, Richard Gregory, and Robert Vance. (Not pictured: Jonathan Guild, Nesmond King, Drew Pennebaker, Russell White, Donald Miller, and Derek D’Acqua.)

OPERATIONAL EXCELLENCE
CMLF Food & Retail Managers have brought about positive changes in operational efficiencies, improved business processes, and enhanced focus on customer service to reduce net profit loss by more than 50 percent: Above: Gabrielle Vitola, Anthony Grassi, and Sandra Daniels. (Not pictured: Yelena Kretova, Mary Jean Blakeslee, Ingrid DellaTorre, and Michelle Wright.)

LEADERSHIP
For his skill, dedication and coordinating efforts related to the heavy lift vessel, Zhen Hua 16, transiting underneath the Twin Span: Shekhar Scindia.
OPERATIONAL EXCELLENCE
For his dedication to Helm CONNECT, the computerized preventative maintenance system recently implemented for Marine Operations: Oiler/LB Derek D’Acqua.

OPERATIONAL EXCELLENCE
Arresting high risk, out-of-state fugitives from Virginia who were driving a stolen vehicle. It was later determined that the suspects were wanted for numerous vehicle thefts including cases in New Jersey: Ptl. Spenser Warren.

CUSTOMER SERVICE
For delivering outstanding customer service, which is above and beyond the call of duty: Douglas Clark, Robert Owens, Michael Romano, Allan Brown, and Nancy Newby.
TEAMWORK
DMB Administration Building renovation work, involving the relocation of Human Resources, Procurement and Breakroom: Randy Jones, Jennifer Bristow, David DiAngelo, Joseph Ogden, Michael Kupchinski, and Kenneth Goodis.

TEAMWORK
Volunteering to work with Port Engineer Jeffrey Roberts and the Assistant Director of Marine Operations Robert Brink at New York shipyards to handle the dry-docking, regulatory inspections, vessel repairs and painting oversight of the MV Delaware and MV Cape Henlopen during the winter of 2017 and into the spring of 2018: Michael Stocko, Michael Calise and Shane McCaffery.

TEAMWORK
ILG Hangar Security Upgrade Team—collaborative effort to install hangar security systems at the Wilmington Airport saving the DRBA more than $100,000 in contracting costs: Richard Linder, Michael Jones, and Dwight Nicholson.

TEAMWORK
For her approach and steady presence in the Cape May Lot, by working effectively and efficiently with the Pilot, Customer Service, Dispatch, Maintenance, and our customers: Maria Leonard.

LIFESAVING AWARD

LIFESAVING AWARD

2018 SAFETY AND ENVIRONMENTAL AWARDS
Lifetime Safety Achievement Award: Jay Jones.
Environmental Stewardship: Denise Ferrigno and Mark Delano.
HAZMAT Response: Chris Donegan, Tony Scartine, Adam Dorrell, Don Federanko, Jeff Hoffman, and Rob Lennon.

SERVICE AWARD WINNERS
FIVE YEARS

TWENTY YEARS
John Coover, John Cross, Richard DiVaccaro, Michelle Griscom, Susan Lonergan, R. Todd Miller, Robert Paluch, Dennis Scanlan, Christopher Schaal, Christopher Schaal.

**TEN YEARS**
Cynthia Banitsky, Emiko Davis, Adam Dorrell, David Haines, Sarah Hendrickson, Michele Huneycutt, Richard Linder, Mary Rehill, Christopher Schemm, Neal Strauss, and Gregory Suchanoff.

**TWENTY-FIVE YEARS**

**THIRTY-FIVE YEARS**
Michael Kupchinski.
Facts
ABOUT THE TWIN SPANS.

FIFTY YEARS AGO
The Twin Span Cost
$70 million
to build in 1968

TRAFFIC
Twin Span largest single day was
79,488
vehicles on November 29, 2009

RECORD SETTING
The Twin Spans recorded its
1 billionth
toll transaction
on December 18, 2012

FIFTY YEARS AGO SEPTEMBER 12, 1968
United States Vice President Hubert H. Humphrey dedicated the second span of the Delaware Memorial Bridge.

LARGEST CONTINUOUS CONCRETE POUR
At the time of construction of the bridge, it included the world’s largest continuous underwater concrete pour ever attempted, utilizing a 14-day around the clock operation.

DESIGN
The New York City engineering firms of Howard, Needles, Tammen & Bergendorff and E. Lionel Pavlo designed the Twin Span. Pavlo, an expert on suspension bridge design, died in 1989. But HNTB still serves as a consultant to the DRBA on the Delaware Memorial Bridge.

CONTRACTS
Although no general contractor was hired for the second span construction, the DRBA did award 57 separate construction contracts

OOPS!
On July 9, 1969, the tanker “Regent Liverpool,” chartered by Texaco, Inc., struck the fender system of the Delaware tower piers, causing more than $1,000,000 in damage.

MORE PER HOUR
Today, the Delaware Memorial Bridge handles more vehicles in one hour than it did during an entire day in 1951 when the first span opened.

ONE-WAY ONLY PLEASE
On October 1, 1992, the Delaware Memorial Bridge adopted one-way tolls, collecting them in the westbound direction only.

OUTSTANDING ACHIEVEMENT
In 1968 the National Society of Professional Engineers
THE OLDER SPAN IS TALLER
The original span, the one with traffic heading toward New Jersey, is one foot taller than the second span.

LONGEST TWIN SPAN
At the time of the second span opening, the Delaware Memorial Bridge was the longest twin suspension bridge in the world. Today, it is the second longest in the U.S., and the ninth longest in the world.

ACROPHOBIA SOLUTION
DRBA bridge police officers can be dispatched to drive a vehicle over the bridge if the driver suffers from fear of heights. Officers handle about 400 of these incidents each year.
BY THE NUMBERS

Traffic in 2018
The DMB showed slight improvement in total traffic year over year, besting by nearly 3,000 vehicles 2017’s tally.

Due to numerous days of inclement weather in 2018, the Cape May-Lewes Ferry fell short of previous year’s traffic total by 21,000.

Current statistics 2018
Both the Delaware Memorial Bridge and the Cape May-Lewes Ferry had good years in traffic and revenue. The DMB experienced slight increases in both categories while the Ferry experienced slight decreases in both traffic and revenue which can be attributed to adverse weather conditions.

<table>
<thead>
<tr>
<th>Statistics</th>
<th>2018</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMB Revenue</td>
<td>$105.86M</td>
<td>+1%</td>
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<tr>
<td>DMB Total Traffic</td>
<td>17,798,174</td>
<td>+.02%</td>
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<tr>
<td>CMLF Revenue</td>
<td>$13.56M</td>
<td>-1%</td>
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<tr>
<td>CMLF Total Traffic</td>
<td>1,021,432</td>
<td>-2%</td>
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</tbody>
</table>
Celebrating the 50th Anniversary of the Twin Span
Delaware River and Bay Authority
P. O. Box 71
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www.drb.net