COMPANY:
Piedmont Airlines, Inc.

EMPLOYEES:
9,200

AUTOMATED SCHEDULING HELPS PIEDMONT PROFIT FROM THE GROUND UP

CHALLENGE:

- Needed an efficient process to manage schedules for ground crews that took seniority and bargaining agreements into account
- Required a way to easily report on employee dependability

SOLUTION:

- Implemented ARCOS RosterApps systemwide to better manage shifts based on the different work groups across ground handling

RESULTS:

- RosterApps reduced the complexity of scheduling for management and administrators, while ensuring that employees weren't working too many hours or consecutive days
- The ability to get planes into the air more efficiently, with less flight delays and a boost in profitability

When Brian Wemple, director of Planning and Support for regional air carrier Piedmont Airlines, Inc., first came to his current role several years ago, he says, "We were looking to take a next step with scheduling."

According to Wemple, there wasn't a system-level way to do shift scheduling, run reports and know how many hours the airline's regional stations were using. The steps involved in creating a suggested shift schedule for ground handling workers wasn't automated.

Piedmont, a wholly owned subsidiary of the American Airlines Group, includes a fleet of 58 Embraer-145 regional jets and approximately 9,200 employees, including 6,000 ground-handling workers.

The regional air carrier's managers had to print out and post schedules in break rooms as well as manage paper forms to assist employees in bidding on and swapping shifts, along with tracking seniority to comply with rules for processing bids and swaps. Using a seniority system, employees could then bid on (and trade) shifts; inevitably, employees asked for exceptions. One person might sign up for half a shift swap and wait for someone to take the other half; employees would frequently check back to see if the swap made it into the schedule book. All the while, managers and administrative staff at the different stations tried to stay on top of schedules, changes, requests and more. Adding to the complexity of staffing were local management teams across Piedmont's 72 sites each handling scheduling in their own way.

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A PLAN FOR IMPROVING CONSISTENCY AND DEPENDABILITY

Wemple says there were two drivers for automating crew scheduling and shift swaps at Piedmont. First, the airline wanted to consistently manage schedules for ground staff. And, second, Piedmont sought a capability to report on employee dependability, or how often workers were accepting shifts. Wemple also saw ground crew scheduling software as one way to reduce flight delays and boost profitability.

Gaining consistent reporting and a common employee roster were critical for Wemple to better analyze whether the airline was deploying equipment and people optimally for day-of-operations. While Piedmont's staff management software takes day-of-flight schedules and generates work assigned to employees, without a platform for a common shift, there was no way for Wemple's team to use its staff management software's capability for bringing in data for employees on duty.

"We either had to build or buy an automated platform," recalls Wemple.

Piedmont relies on its staff planning software, among other systems, to forecast and adjust staffing levels (e.g., Piedmont typically schedules four to seven employees for each aircraft on the ramp) to meet multiple load-factor assumptions. American Airlines' headquarters regularly creates proposals for future flight schedules, and its team brings those proposals into the staff planning software to run the proposed flight schedules against the ground handling staff requirements to come up with headcount for each Piedmont location. The airline's Planning

arcos **RosterApps**

and Support team takes flight schedules and inputs data from Piedmont location managers and creates a utilization plan aligned to a budget and operations.

The staff planning software systems help "plan operations from a staffing perspective by looking at the headcount we need and the times of day; that takes us to a suggested work schedule," says Wemple, who's worked for 20 years at the airline in various roles beginning as a manager of ground equipment inventory. Wemple's group plans the resource provisioning for ground handling.

AN AUTOMATED GROUND CREW SCHEDULING SOLUTION EMPOWERS WORKFORCE

After internal analysis, Wemple happened to be at an industry conference where he met a JetBlue manager and asked how the airline was handling staffing issues. "He told me they had a software suite for staffing called *ARCOS RosterApps*," says Wemple.

Piedmont did its due diligence and implemented *ARCOS RosterApps* for a subset of its 72 locations to generate a schedule based on the different work groups across ground handling. The software also gave Wemple's team a near-systemwide look at how bidding on work was aligning with flight schedules.

Over a few years, the developers of *ARCOS RosterApps* expanded the platform's capabilities and Piedmont rolled out the software systemwide to integrate it with the software systems for flight operations and day-of-operations. With *ARCOS RosterApps*, Wemple had a consistent source for decision-making about how the airline deployed ground-handling workers; local managers were able to get away from using Excel spreadsheets and an Access database, which Wemple called "a complete hodgepodge."

Now when headquarters develops a schedule, Wemple provides that to his local operations groups and they fine tune it for what works best for them. The schedule isn't fully optimal at that point. Wemple's team then puts the schedule, along with the requisite workplace rules, into *ARCOS RosterApps* for employees to bid on. With the employees' preferences locked into *ARCOS RosterApps*, the Planning and Support group can help the airline analyze schedules (and see potential shortfalls or overages in staffing and skills) two to four months in advance.

Wemple's planners can parse schedules by work groups or skills and quickly see, for example, if too many people are scheduled to run baggage, while there aren't enough to load or unload bags. When the team spots imbalances via *ARCOS RosterApps*, they help local managers understand and ask if an adjustment on the planning side might need to happen, possibly creating a new shift bid.

REAL-TIME ANALYSIS FOR SHIFTING NEEDS

Piedmont says *ARCOS RosterApps* has not only reduced the complexity of scheduling for management and administrators but also ensures employees aren't working too many hours or consecutive days. The ground crew scheduling platform also verifies that ground handling staff meet the minimum work hours during a given time period.

"Verifying we have the right people in the right place is practically instantaneous now, and before it could take local managers a couple of hours to check every time," adds Wemple. "The management of the employees' schedule is now in the hands of the employee."

It was also important to Wemple to have something that employees could use easily. So the airline also developed a 30-minute course covering the basics of *ARCOS RosterApps*. "Since launching *ARCOS RosterApps*, I've never heard someone say it's too complicated," remarks Wemple.

Having the flexibility to trade shifts for personal reasons or take advantage of free travel is a hallmark of the industry. Taking the process from bulletin boards to a worker's hand is a perk, says Wemple, that improves employee satisfaction and retention.

The Planning and Support group now uses *ARCOS RosterApps* regularly to analyze, for instance, a current bid for a station by looking at coverage hours and comparing future flight schedules and plane requirements by overlaying the two and seeing the variance. If they note a variance, they can alert operations and suggest a new bid. This would shift some coverage so the station isn't understaffed.

"Before *ARCOS RosterApps*, we wouldn't be able to do that," recalls Wemple. "By quickly filling shifts with the right people and equipment on the tarmac, we get planes into the air more efficiently."