The World of Today – Line Bidding
Edition 1

Fellow Spirit Pilots, as we transition from the line bidding world of today, into the PBS world of tomorrow, it is important to highlight and understand where we are coming from. We as a group, with that understanding, will be able to educate, gather information, compare, and contrast two very different bidding methods. To that end, we have created "The Bidline Bulletin", which will contain a series of weekly communications discussing both "The World of Today", and "Stepping Into Tomorrow." In this first edition, we will explore the genesis of pilot pairings and lines under our current method, "line bidding."

What's a Flight File?

The Crew Planning Department works about 45 days ahead of time. For example, sometime between the second and third week of November, the Crew Planning department is given a file that has every individual flight segment in the Spirit Airlines network for January. This file is developed by the Network Planning Department in conjunction with the Marketing Department.

This file is then "washed" through a piece of software called a pairing optimizer. Currently, Spirit uses a pairing optimizer from a company called S3RUS. The pairing optimizer takes all of the segments to be flown in that particular month and combines them into what we know as pairings. This is done using a complicated algorithm and set of adjustable rules in order to produce a desired outcome with respect to the Company's operational needs, overall cost, pilot CBA, and pilot quality of life.

How does S3RUS work?

Like any software, S3RUS works only as fast as the computing power behind it and the complexity of the problem being solved. The batch of pairings generated at the end of this optimization process is referred to as a "solution". The Company has invested significant resources (computing and man power) behind the optimizer and is able to turn out solutions in as little as a few hours. The program takes the approximately 15,000 (and growing) monthly segments and tries to efficiently combine them into pairings while adhering to the restrictions contained in what is called a Rule File. These restrictions include but are not limited to: FAR 117 limitations, CBA limitations, and company instituted buffers. A great example of a company instituted buffer would be LGA, where on specific inbound flights the pilots are sent to the hotel in order to ensure the following mornings' "Fleet Launch" flight leaves on time. Other examples of items contained in the Rule File would be connection times, maximum number of legs that can be flown in a day, and our current trip rig of 1:4.2.

The Company loads the flight file, rule file, and a few other files into S3RUS and then runs a "stress test". This first run lets the program run unrestricted, and build pairings originating at any of the pilot domiciles it choses as most efficient. This first step identifies areas to adjust while working toward a finished product. For example, the stress test may put more flying into a base than that base can accommodate, or may require an excessive number of hotel stays or deadheads. Crew Planners and ALPA Scheduling Committee volunteers jointly make parameter modifications within the rule file, taking into account pilot quality of life enhancements, operational integrity, and CBA compliance, and begin new runs. Each run can take a few hours or more to complete and once each run is complete, the program produces summary data files for analysis. These summaries include information like: block hours per base, average block hours flown per day, total number of deadheads for the month, and many other data points used to assess the viability of a solution. Modifications are made until a solution is found that works for both Crew Planning and ALPA.

Once a final solution is reached, the Pairing File is now ready for the line build process.

So, who really builds the lines?

After we have a final pairing solution, the trips needed for the construction of OE lines are removed by the Training Department. The Training Department may remove up to 5% of the flying in each Position (Position is seat and base specific, e.g. CA FLL or FO LAS), and with MEC notification, an additional 3% of flying in each Position. The remaining pairings are then used to construct the bid lines. A bid line generator, also an S3RUS product, is used to create the lines in each base. Two members of the ALPA Scheduling Committee will construct the bid lines using the S3RUS bid line generator. The Company provides ALPA with the required Average Line Value for each Position, along with required number of Regular, Relief, and Reserve lines. As a matter of practice, so long as ALPA can produce lines that meet the Company's aforementioned requirements, ALPA's lines are used. In all cases, the published lines are jointly constructed per the pilot CBA.

When building the bid lines, Scheduling Committee volunteers do their best to balance pilot expectations and operational targets. Meaning, a good spread of weekends off, high credit, low credit, day trips, 2-day trips, red eye turns, and holidays off, to name a few. All of these considerations must also adhere to the constraints provided by Crew Planning/Crew Resources.

Once the lines are built and accepted by Crew Planning, they are ready to be published in the monthly bid package. A moment of silence will now be taken for our dear friend, the paper bid package....

The electronic bid packages are published to the pilots for review, and loaded into FLICA for bidding purposes. The bid will open and close according to the contractual bidding timeline, the lines are awarded, and we then move on to the next phase of the process.

This completes our overview of the current processes involved in construction of the pairing and line build files. In our next edition of the Bidline Bulletin, we will explore and discuss construction of Final Schedule, and the three schedule augmentation periods currently available to us.