MESABA AIRLINES

Preferential Bidding System for Pilots

Pilot User Manual

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Produced and Maintained by Mesaba MEC PBS Committee Air Line Pilots Association, International

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1 OVERVIEW

This Preferential Bidding System (PBS) Manual is designed to be useful to all pilots, no matter what their previous computer or PBS experience. Thoroughly reading this manual will help in your overall understanding of PBS and enhance your chances of making a successful bid. As you continue to use the system, this manual will become a useful reference as you improve your bidding techniques and strategies each month.

Based on your previous computer and PBS experience, you may use some sections of this manual more than others. It is suggested that you read the entire manual in its entirety at least once in order to familiarize yourself with the contents and layout of the manual. Some PBS concepts are repeated in several sections while others may only be mentioned once.

This document is divided into the following sections:

<u>Index</u> – We have assembled a subject matter index and placed it in the *beginning* of the document for ease of reference

<u>Overview</u> – gives the reader of this manual an outline of what is contained in the manual and provided useful contact and help information. You are in this section.

<u>Definitions</u> – provides definitions of terms used throughout this manual and on the PBS Crew Interface.

<u>System Description and Operation</u> – contains background information on how the Mesaba PBS is designed and how it works. This includes a detailed description of the Crew Interface.

<u>Monthly Bidding Process and Timelines</u> – in addition to references in the pilot contract, this section will outline the timeline of the monthly bidding process used to construct schedules.

<u>Pilot Preferences and Bidding</u> – describes basic PBS bidding concepts. Expressing preferences with "Desire" and "Avoid", bid weighting, and use of the bid analyzer.

<u>Bid Options</u> – this section includes a complete description of all bid options available in the Mesaba PBS for Pilots.

<u>Bidding Methods and Strategies</u> – provides a primer on bidding methods, common mistakes, and strategies for common schedule requests and situations.

1.2 NEED HELP?

Please utilize the following resources if you need help with PBS:

PILOT PBS HELP DESK

1-888-MSA-4PBS

1-888-672-4727

PBSHelp@alpa.org

The Pilot PBS Help Desk is staffed with members of the ALPA PBS Committee during normal business hours (9am to 5pm CST) when the bid sessions are open.

Callers may also leave a voicemail on the phone line when line is busy, or a bid is not currently open. Send an email to the Help Desk at <u>PBSHelp@alpa.org</u>.

MESABA CREW PLANNING DEPARTMENT

651-367-5154 pbshelp@mesaba.com

The Mesaba Airlines Crew Planning Department is responsible for running the PBS.

MESABA I.S. DEPARTMENT

1-866-600-5300 ishelpdesk@mesaba.com

The Mesaba Airlines I.S. Department maintains the PBS. Contact them directly if you have system login issues.

ALPA – MESABA MEC PBS COMMITTEE

952-853-2384 msapbs@alpa.org

ALPA's MSA MEC PBS Committee is the direct resource for union representation on PBS and schedule construction issues. The phone number and email address provided here should be used for general questions, committee operations, and pilot contract information regarding PBS.

1.3 Disclaimer

IF THERE IS A DISAGREEMENT BETWEEN THE PILOT CONTRACT AND THIS MANUAL, ANY DOCUMENTS POSTED BY MESABA AIRLINES, ALPA, OR ANY OTHER ENTITY, <u>THE PILOT CONTRACT (INCLUDING ANY LETTERS OF</u> <u>AGREEMENT) TAKES PRECEDENCE</u>.

1.4 Gender

For the sake of clarity and editorial efficiency, the male gender is used throughout this publication to apply (where applicable) to both male and female employees. No discrimination is intended or implied.

1.5 Errors and Omissions

This manual is intended to be as complete and as accurate as is possible while remaining true to its purpose. If any errors or omissions are found, please report them to the ALPA PBS Committee by emailing <u>msapbs@alpa.org</u>.

1.6 Acknowledgements

This manual was written by Mesaba ALPA Pilots, for Mesaba ALPA Pilots. The MSA MEC PBS Committee relied on several resources, including the work of ALPA pilots at other carriers who's advice and input on PBS was invaluable. We worked with pilots serving on PBS or Scheduling Committees at the following airlines: United, America West/US Airways, Northwest/Delta, Pinnacle, Hawaiian, Compass, Comair, and Sun Country. We especially give acknowledgement and thanks to David Weeks (fmr AWA), and Cullen Bankole (UAL).

2 DEFINITIONS

This section provides a definition of the terms used throughout this manual and within the PBS interface.

AD OPT	AD OPT is a division of Kronos, Inc, and is the programmer/vendor of the Altitude® PBS software and technology used by Mesaba Airlines.
Allow Single Day Off	An option the pilot can select to allow PBS to award single day(s) off during the month, in addition to single day(s) off that are allowed on the first and last days of the bid period.
Altitude® PBS	The name of the software used for the Mesaba Airlines pilot and flight attendant preferential bidding systems.
Arrival (time)	The arrival time of a duty or pairing assignment is the termination of the last leg (flight or ground transport) of the duty or pairing.
Automatic Weighting	One of the two methods of weighting preferences in PBS. Using Automatic Bid Weighting, the pilot can specify preferences at 3 levels: High, Medium, and Low. (See also Manual Bid Weighting)
Avoid	A request to NOT be awarded a line that contains pairings with a specific bid option's characteristic. When using Avoid with a bid preference, the pilot is saying "I do not want this. Give me none of this or as little of this as possible." If the Solver awards an option the pilot has asked to Avoid, the bid option scores negatively. If the Solver does not give the pilot what he has asked to Avoid, the bid option scores zero. (See also Desire)
Base	A location around which pairings are constructed and at which pilots are domiciled. (MSP, DTW, MEM)
Bid Analyzer	A tool within the Crew Interface which allows pilots to sort and examine pairings based upon the bids they have entered into the system. The Bid Analyzer allows a pilot to validate the behavior/result of bids.
Bid Criteria	See Bid Options.

Bid Options	A list of selectable bidding options or criteria available to the pilot. Bid Options are also referred to as "requests." The options are broken down into eight distinct categories, called bid option classes.				
Bid Option Class	The grouping of the bid options. There are eight distinct bid option classes: Time Off Requests, Pairing Requests, Pairing Layover Requests, Work Requests, Quality of Life Requests, Productivity Requests, Reserve Requests, and Short Term Training Requests.				
Bid Package	The package of info necessary for a pilo	rmation that shows da t to bid.	ta		
Bid Period	The period of time that relates to a particular bid session. The pilot bid months are defined in the CBA Section 2 and in the table below:				
	Bid Period	Dates	Days		
	January	Jan 1 – Jan 30	30		
	February*	Jan 31 – Mar 1	30		
	March	Mar 2 – Mar 31	30		
	April	Apr 1 – Apr 30	30		
	May	May 1 – May 31	31		
	June	Jun 1 – Jun 30	30		
	July	Jul 1 – Jul 31	31		
	August	Aug 1 – Aug 31	31		
	September	Sep 1 – Sep 30	30		
	October	Oct 1 – Oct 31	31		
	November	Nov 1 – Nov 30	30		
	December	Dec 1 – Dec 31	31		
	*During any leap year, February will be a 31 day month.				
Bid Scope	Bid Scope refers to which type of a line an entered bid will apply. (Regular or Reserve)				
Bid Weighting	The process by which pilots indicate to PBS, the relative importance of the bid options selected. Pilots have the option of using either automatic (High, Medium, Low) or manual (1 to 1000 points) bid weighting. The pilot can select only one method of bid weighting for each Bid Period.				

Browser (Web Browser)	A program used to view sites on the world-wide-web. To access PBS and enter bid options, pilots must use a web browser.		
Carry In Pairing	A pairing that started in the previous month and continues into the current month.		
Carry Out Pairing	A pairing that started in the current month and continues into the next month.		
Category	Aircraft/seat combination (e.g., SF340 CA)		
Category Line Report	A report that shows all pilot schedules by position (a position is designated by domicile and category, i.e. MSP SF340 CA).		
СВА	Collective Bargaining Agreement. (Also known as the pilot contract)		
CDO	Continuous Duty Overnight. CDO pairings are separated into a unique pairing class from all other pairings in PBS.		
CDO Line(s)	CDO Lines ("pure CDO lines) will contain CDO trip patterns and days off. CDO lines may contain Planned Activities and days of unavailability. No reserve days will appear on CDO lines. No non-CDO trip patterns will appear in an awarded CDO line, unless a non-CDO trip is carried in from the previous month. CDO lines will be built manually by Crew Planning per the provisions listed in the CBA.		
Check-in (time)	The time a duty period begins. Not to be confused with departure time. Duty periods for a specific trip begin one hour before departure at your domicile, and 30 minutes before departure at an outstation.		
Check-out (time)	The time a duty period ends. Not to be confused with arrival time. Duty periods for a specific trip end 15 minutes after the arrival time at an outstation, or 30 minutes after the arrival time at your domicile.		
Crew Interface	The part of PBS where Pilots enter bids, and view schedule bidding information and reports.		

Crewmember Requests	Bid options (preferences), used by pilots to describe to the PBS the characteristics they desire or want to avoid for their monthly line of flying.
Default Bid	The bid the PBS uses if a pilot has not entered a Specific Monthly Bid and also does not have a Standing Bid on file. The ALPA PBS Committee determines the Default Bid for each position. (See also Standing Bid.) Currently the standing bid for all positions is "50 PTS DESIRE DAYS OFF"
Default Line Range	The range of Schedule Credit and block hours PBS will build a regular line within.
Default Value (weight)	The initial value PBS enters for a bid option when the pilot first adds it to the list of bid options. The default value is <i>50</i> points when using manual weighting and <i>Medium</i> when using automatic weighting. If the pilot switches from manual to automatic weighting (or vice versa) during bidding, the system initially assigns the default value to all selected bid options.
Departure (time)	The starting time of the first leg (flight, deadhead, ground transport) of the duty period or pairing.
Desire	A request to be awarded a line that contains pairings with a specific bid option's characteristic. When using Desire, the pilot is saying, "I want this. Give me as much of this as possible." If the Solver awards a Desire request, the bid option scores positively. If the Solver does not grant the request, the bid option scores zero. (See also Avoid.)
Domicile Rest	Time free from all Company duty. Rest begins at check-out time and rest ends at check-in time. Domicile rest must be at the pilot's domicile.
Domicile Time (LDT)	Local domicile time; time at the pilot's home base.
Duty	Any company assigned activity (flight, ground, office, etc.)
Enable Max Line Range	The Maximum Line Range option allows a pilot to volunteer to have his line constructed to the following (increased) limits: 94 block hours and 105 credit hours. This is selectable as an "Other Option".

Global Feasibility Check	Prior to building lines for a position, the Solver looks at the number of pilots, their availability, and the total flying hours to assign in order to determine if a solution is possible. (Pilot Preferences are not taken into account during this phase)
Flight Segment	A leg (flight or ground transportation) within a duty period. (See also Segment.) There may be more than one flight segment within a duty period.
Global Constraints	PBS system constraints that affect all pilots, e.g. Line Range, Reserve coverage, Pilot Staffing, available flying etc.
Green Pilot	A pilot who has not met the 100 hours of flight time required per FAR 121.434(g). Pilots designated as "Green" who are awarded a regular line will automatically have "Maximum Line Range" applied as a Crewmember Request to the Solver.
Green Line	A regular line awarded to a pilot who is considered Green and would not otherwise hold a regular line.
Layover	Legal duty break between two duty periods when the pilot is not at his home base.
Layover Station	City (or station) at which a layover takes place.
Line	A pilot's monthly schedule. A pilot may receive a regular line, reserve line, CDO line, or build-up line.
Manual Weighting	One of the two methods for weighting the bid options in PBS. Allowable range is 1 to 1000 points. (See also Automatic Bid Weighting)
Other Options	Bidding options available to the pilot that, unlike normal preferences, are not weighted. Pilots select Other Options by clicking the appropriate check box on the Other Options tab in the Crew Interface. The Other Options include: Allow Single Day Off, Enable Maximum Line Range, Request any CDO line, Allow PC/RFT within 7 days following vacation, Ready Reserve preference, First out/ Last out preference, Volunteer to perform Ready Reserve, Allow for trip substitution.

Pairing	A group of flights (and, or) deadheads defined by a single pairing number where the first segment of the first duty period begins at the pilot's domicile and the last segment of the last duty period ends at the pilot's domicile.
Pairing Class	Classification of a pairing based upon a characteristic of the pairing which may affect hours of service and schedule construction rules for that pairing. (Two pairing classes are currently in use at Mesaba Airlines: CDO and Non-CDO)
Pairing Reports	A report selectable in the Crew Interface that displays all the pairings available in the pilot's category.
Personal Calendar	A feature within the Crew Interface that enables the pilot to view his Planned Activities and flight assignments (i.e. vacation, training, carry out pairings, training events) for the current bid period, as well as for past and future bid periods. The pilot can also enter and display short notes on the Personal Calendar. The content of the personal calendar is private to the pilot. Other pilots, the administrator, or Company planners cannot see it.
Planner Interface	The portion of the PBS Crew Planning uses to control PBS. The Planner Interface allows the planner to open and close bid periods, set line construction parameters to meet contractual requirements, reserve coverage requirements, run PBS solutions, and import/export data to/from other Mesaba Airlines computer systems.
Position	Domicile/Aircraft/Seat combination (e.g. MSP SF340 CA)
Potential Score	Possible score attainable by multiplying weight times the number of potential occurrences.
Planned Activities	Is an event (including, but not limited to vacation, leaves of absence, or Short Term Training) which is scheduled on a pilot's line in advance of the Monthly Bid. PBS will build pilot lines around these activities.
Preferences	See Bid Options.

Regular Line	Contains trip patterns and days off. Regular lines may contain Planned Activities. No reserve days will appear in a regular line.		
Reserve Line	Contains reserve days and days off. Reserve lines may contain Planned Activities. No trip patterns will appear in a reserve line, unless carried in from a previous month.		
Schedule Credit	Is the amount of credit time assigned to a particular activity or duty assignment for the purpose of schedule construction.		
Single Line Report	A report accessible in the Crew Interface showing the pilot's line Final Line Award as delivered by PBS. The report also includes a summary of the crewmember's bids and the resultant scoring of the bids. When the bid period is closed and the Solver has built the lines, pilots can view and print their personal Single Line Report.		
Solution	The output from the PBS Solver when a request is made for a certain award process by the planner.		
Solver	The PBS component that produces solutions for short term training, CDO line, regular line, and reserve line awards.		
Specific Monthly Bid	The group of bid preferences that the Solver will only use in one Bid Month or bid session (see also Standing Bid and Default Bid)		
Standing Bid	The group of bid preferences that the Solver uses if the pilot has not entered a Specific Monthly Bid. The pilot can enter a Standing Bid via the Crew Interface at any time. (See also Specific Monthly Bid and Default Bid.)		
TAFB	Time away from base. The total time from check-in to check-out for a pairing.		
Work Period	Consecutive days of work not separated by day(s) off. Example: Four one day trips in a row is one work period. One four day trip is one work period. Two, two day trips back to back is one work period.		

3 SYSTEM DESCRIPTION AND OPERATION

3.1 What Is PBS?

PBS stands for "Preferential Bidding System." It is a comprehensive monthly bidding and scheduling system used to create personalized monthly schedules. The objective of the system is to create schedules which maximize crewmember satisfaction while maintaining an optimal, legal schedule solution for all pilots. It does so by respecting the rules in the CBA, and by working around Planned Activities such as recurrent training or vacation. It also helps the airline to meet their operational objectives such as reserve coverage and open time control. PBS gives crewmembers greater control over their schedules and work lives than "line bidding," which is the old pencil-and-paper based system of schedule bidding.

The PBS developed for Mesaba Pilots will be utilized to construct all regular and reserve lines, with the exception of CDO Lines which will be constructed manually by Crew Planning. The PBS will be used, however, to conduct all bidding and awarding of scheduled duty, including Short Term Training events. The system was developed and customized by the vendor with guidance from both Mesaba Airlines and ALPA.

3.2 System Software, Requirements, and Components

3.2.1 System Software

Mesaba Airlines has chosen to utilize the Altitude PBS® by AD OPT Technologies, a division of Kronos, Incorporated. The software package was customized for Mesaba Pilots.

3.2.2 System Requirements

The Crew Interface, which pilots will use to access PBS, is a web-browser based application. It allows a pilot to bid from any computer equipped with an Internet connection and a compatible web browser. (see below for browser requirements)

The Crew Interface uses point and click functionality for selecting and entering bid options. There is no option to enter bids without a mouse or other pointing device.

Using the Crew Interface the pilot is able to input, edit (add, delete and modify) and save his current, future, or standing bid.

The minimum browser requirements are: Microsoft Internet Explorer 6.0 or Mozilla Firefox 3.0

3.2.2. Login Access and Security

Access to PBS is obtained through a dedicated website:

http://pbs.mymesaba.com

Links to the PBS website are also provided for in the main MyMesaba website, under My Department -->Flight Ops-->Bidding Links.

When accessing PBS, you will utilize your MyMesaba login credentials:

MyMesaba	
PBS	Login
User Id :	
Password :	
	GO
Use your mymesaba.com cr To update your password login t	edentials to login. o mymesaba.com

3.2.3 System Components

The PBS software is made up of three major components:

Crew Interface

The Crew Interface is a web-based application that crewmembers use to create, edit, analyze, and submit their bids. The Crew Interface provides the only access to PBS for the individual pilot.

The Planner Interface

The Planner Interface is the PBS component used by Mesaba Airline's Crew Planning department. The Planner Interface allows the planner to define the bid periods, define system constraints, define required reserve coverage, save or delete solutions, archive solutions, and prepare files for other Mesaba Airlines systems. Except for designated representatives of the ALPA PBS Committee, pilots do not have access to the Planner Interface.

Solver

The final component of PBS is the Solver, the software program that produces the lines. The Solver is the 'engine' of the PBS system. The task of the Solver is to accommodate in an optimal way, the preferences of each pilot taking into consideration the pilot's seniority, available pairings, system constraints, and manpower availability. It is important to note that although the planner launches solutions, the planner cannot manipulate how the Solver builds an individual line.

3.3 PBS Philosophy/Methodology

In PBS, the majority of crewmembers do not have sort through and bid for preconstructed lines that match their desires. The only exception is for bidders of CDO lines, who will pick from lines manually constructed by Crew Planning. Pilots who are bidding for regular or reserve lines in PBS will describe, via Bid Preferences, what the "perfect" line would be. PBS then constructs a line for each crewmember using his personal preferences, while abiding with contractual, FAR, and staffing limitations.

Your bid identifies the type of flying and working conditions you desire. PBS evaluates combinations of trips, working periods, days off, etc. according to your bid preferences. The objective is to award you a line consisting of the highest quality (or score) possible. The PBS solver looks at all the parameters together, and seeks the highest scoring combination.

3.3.1 Solving Processes

3.3.1.1 Short Term Training Events

Pilots who will need to attend Short Term Training (STT) during the upcoming bid month will utilize the PBS to bid for STT events. These events commonly include, but are not limited to, recurrent ground school (RGS), proficiency checks (PC), and recurrent flight training (RFT).

To allow access to PBS to conduct the bid, Crew Planning opens up the bid session for the entire bid month. This occurs no later than ten (10) days prior to when pilots will begin bidding for flying schedules in the "Monthly Bid." To make the distinction between the timeframe for the Monthly Bid, the timeframe used to bid for STT is referred to as the "Early Bid."

Each pilot who will be required to attend STT will be notified via the Early Bid package. The package will list a roster of pilots requiring STT and the STT each pilot needs to attend. In addition, a pop-up window in PBS will indicate the requirement to bid for STT as a reminder.

When the Crew Planning makes a Solver request to award the STT events the Solver will begin awarding with the most senior pilot in each position who requires a STT award. The Solver will match up available STT events in accordance with a pilot's bid preferences, maximizing the scoring of the pilots bid. If no bid is entered, the pilot is assigned his STT event arbitrarily by the Solver.

Once all of the STT events are awarded, the planner publishes the STT award, and all STT events are placed on pilot schedules as Planned Activities for the bid month. A pilot will be able to log into the PBS Crew Interface and view the "Training Award Report" as well as be able to view the STT event he was awarded in the "Personal Calendar" in the Crew Interface.

3.3.1.2 CDO Lines

The version of Altitude® PBS that Mesaba Airlines currently has does not have the Solver logic to construct pure CDO lines from pilot preferences. Instead, CDO lines will be constructed manually by Crew Planning in accordance with the CBA. Planners will construct the CDO lines directly in the PBS Planner Interface, and publish them to the Crew Interface for pilots to view.

When the Monthly Bid begins, each pilot who desires one of the pre-built CDO lines may enter an ordered list of desired CDO lines. Pilots bidding on CDO lines will also be able to enter preferences for regular and reserve lines. If there are not enough bidders for the pre-built CDO lines, the remaining CDO lines will be

assigned to pilots who bid "Desire ANY CDO line if none of my selections is available," or to the most junior pilot in the position that does not require a green line. If a pilot bid for, but is not awarded, a CDO line, they will be awarded a regular or reserve line based on their preferences and seniority.

Pilots awarded CDO lines will have their Planned Activities placed onto their schedules manually by Crew Planning after the CDO Line Award. Inevitably, this will cause CDO pairings which conflict with these activities to be dropped from the awarded line, and placed back into the pool of unassigned pairings. After the integration of Planned Activities onto the lines of pilots who were awarded the original pre-built CDO lines, Crew Planning will evaluate the CDO pairings remaining in the pool to see if additional pure CDO lines can be built. If so, they will build as many additional CDO lines, consolidating the remaining CDO pairings into pure lines to the maximum extent possible.

Pilots who selected the option "Desire ANY CDO line if none of my selections is available" in their bid, and who did not receive an award from any of the first round of pre-built lines, will be awarded the additional CDO lines, in seniority order. The only drawback to this option is that the composition of these additional lines is unknown at the time the pilot bids. However, if a pilot just wanted a CDO line, without any preference as to the CDO pairings or days off built on the line, they could bid this option. Again, if there are not a sufficient number of bidders for all of the additional CDO lines constructed, the lines will be assigned to the most junior pilots in the position in inverse seniority order.

After the additional CDO lines are awarded, Crew Planning will again integrate the Planned Activities onto these lines causing some CDO pairings to be placed back into the pool of unassigned pairings. These CDO pairings, along with any other CDO pairing that was not assigned to either the original or additional CDO lines, will be eligible to be awarded to regular line holders.

In accordance with provisions in the Mesaba Pilot CBA, the number of regular lines that contain both CDO and non-CDO pairings (also known as "mixed lines") shall be minimized by the Solver. If pilots bidding for regular lines wish to avoid receiving any CDO pairings on their line, they should bid accordingly. This is accomplished by utilizing the "Pairing Class" bid option (see page 99 later in this manual for details).

After all CDO lines are awarded and integrated with Planned Activities, the pilots awarded CDO lines are locked out of the remainder of the PBS solution for regular and reserve lines.

3.3.1.2.1 CDO Line Solver Examples

Below are some examples of how a CDO line bid and award could be run by the Solver, depending on the bids entered by each pilot:

Bidder	Lines Bid (in order)	Award
1	Any CDO Line	Line 3
2	1, 2	Line 1
3	1, Any CDO Line	Line 4
4	1, 2, 3, 4	Line 2

The example above demonstrates how the Solver will award bids for *specific* line requests *before* awarding bids for only "Any CDO Line." In other words, Bidder 1's request for "any" CDO line was considered secondary to the specific bid for Line 1 by Bidder #2.

Taking this same example a bit further, assume that there were other bidders who had some sort of a desire for a CDO line. Also assume that out of CDO lines 1-4, Crew Planning was able to create 2 additional CDO lines (lines 5 and 6) after integrating planned activities. In the table below, bidder's 1-4 have already been awarded a CDO line, so they are crosshatched:

Bidder	Lines Bid (in order)	Award	
1	Any CDO Line	Line 3	
2	1, 2	Line 1	
3	1, Any CDO Line	Line 4	
4	1, 2, 3, 4	Line 2	
5	1, 2, 3, 4	No CDO Line	
6	Any CDO Line	Line 5	
7	No Bid for CDO Line	No CDO Line	
8	4	No CDO Line	
9	2, Any CDO Line	Line 6	
10	Any CDO Line	No CDO Line	

Pilots who were awarded one of the pre-built, published lines are not affected by the bids made by pilots junior to them when the secondary, un-published lines are awarded. Also note that if none of the CDO line bid preferences (either numbered lines or "ANY" line) are able to be satisfied, the pilot will not be awarded a CDO line and will be given either a regular or reserve line in accordance with his preferences.

NOTE If you are not awarded a CDO Line, you *will* be considered for either a regular or reserve line.

3.3.1.3 Regular Lines

When PBS constructs and awards regular and reserve lines, Crew Planning is requesting what is known as the "Lineholder's Award" from the Solver. This solution process first conducts a global feasibility run, then does a regular line construction run, and finally constructs reserve lines, in that order.

Before the Monthly Bid opens, Crew Planning will ensure all Planned Activities are placed onto pilot schedules and that proper pairing, crew qualification, and station information is loaded into the Crew Interface. In addition the last seven days of the previous month's schedule are loaded into the system. After the Monthly Bid closes, all crewmember bids are then locked into the system and the solution is run. Processing can take from a few minutes to several hours, per position, to reach a successful solution.

With respect to regular lines, PBS will build lines based on the following:

- > Available Flying after building more senior pilots' lines.
- Global Constraints. The line construction process includes provisions to meet specific overall objectives. Lines must be constructed to provide sufficient staffing coverage for the projected flying, acceptable line minimum flying time, acceptable quantity of open time, etc. Attaining these objectives may require some restrictions during line construction.
- Contractual/Legal Constraints. The line must remain within the rules of the contract and FAA regulation.
- Specific Bid that you create. Your bid file is a description of desired working conditions, and/or specific flights and trips.

At the beginning of the solving process, during the global feasibility run as mentioned above, the system determines the mathematical feasibility of producing lines for a category given the number of pilots, the minimum and maximum number of reserves lines the Solver will be allowed to build, the minimum amount of Schedule Credit each regular line must contain, pilot absences, and the total flying available to assign. This check is performed *without* regard to pilot preferences in order to see if it is even possible to create a solution for the category. If it is not feasible to build a complete solution, a warning is sent to the planner and the run stops. The planner must then modify one or more of the system constraints (such as modifying the Default Line Range or increasing the minimum number of reserves) and start the solution again. If the Solver determines it is feasible to produce a complete solution, then the Solver proceeds with building lines for each pilot. The Solver begins building lines with the most senior pilot in the position. It first considers assigning the pilot a regular line. If regular lines are available in the position and the pilot has *NOT* indicated a desire for a reserve line, the system begins building the pilot a regular line. If the pilot *HAS* indicated a desire for a reserve line, the system will evaluate whether or not there is a reserve line available in the position. If so, the system will build him a reserve line. PBS will continue to build regular lines as long as there is flying and pilots available to build legal lines while preserving the number of pilots in the position needed to cover the requested minimum number of reserve lines.

While building a pilot's line, the Solver scores each pairing in the pool of available pairings based on the pilot's bid preferences. It then determines what combination of those pairings would maximize the pilot's total score (as indicated only by the pilot's preferences) and builds the line that maximizes the pilot's total score. While building each pilot's line, the Solver also ensures it can still build legal lines for all pilots junior to this pilot without regard to their preferences. If a pairing helps maximize a line's score (or minimizes the reduction of the line's score) the Solver will put that pairing in the pilot's line regardless of what junior pilots have bid.

The Solver constantly re-evaluates global feasibility when doing the line construction run. For example, the Solver will not award a pairing to a senior pilot if awarding that pairing would force a junior pilot holding a regular line onto a reserve line. This could happen if the junior pilot has pre-assigned activities (absences, inbound trips, etc.) that significantly reduce the number of available pairings that can legally be used in his line. In this case, rather than force a regular line holder on to reserve, the Solver gives the junior pilot the pairing that will make his line legal regardless of what the senior pilot has bid.

After the Solver builds a legal line for a pilot it "freezes" that line, removing the pairings assigned to that pilot from the pool of available pairings, and repeats the process for the next pilot. As it proceeds down the list of pilots in that position in seniority order, the pool of available pairings gets smaller. The Solver may not be able to grant a pilot his preferences due to what more senior pilots have bid, and that the choices of available flying decreases as the run nears completion.

3.3.1.4 Reserve Lines

During the lineholders award solution process, when there are no longer enough pairings remaining in the pool to build a regular line or when the Solver only has enough pilots left to cover the minimum number of reserve lines, the Solver begins building reserve lines.

At this point of the solution, the Solver has determined exactly how many regular and reserve lines will be awarded. The remainder of the reserve line construction process has a primary objective of meeting the requested reserve coverage entered into PBS by Crew Planning. Reserve coverage is considered on a daily basis by the Solver, and depending on the number of unassigned trips remaining from the construction of regular lines (open time) can be adjusted to ensure that reserve coverage is preserved on dates that open time exists.

As a result, it is important to remember that crewmember requests for time off are a secondary objective of the Solver when building reserve lines. While every reserve line pilot will receive their minimum days off, the specific dates free of duty will be determined by reserve coverage constraints, and seniority. Bids entered by the pilot in the reserve "scope" will be evaluated by the Solver, and the line which maximizes the pilots score will be awarded to the pilot.

One final process is executed by the Solver for the reserve lines – the assignment of contact periods (P1, P2, or P3 depending on the position). AD OPT has designated this as "Reserve Line Type" in PBS, which refers to the "type" of contact period that will be assigned for the entire month. At this point, a pilot's reserve line has been constructed with days of reserve duty and days off. The Solver will now consider the number of reserve lines (minimum and maximum) requested for each reserve contact period. In seniority order, the Solver will then award contact periods to the reserve lines. It is important to note that the award of contact periods do not alter the days designated either on duty or off in the solution – it simply assigns the contact period without regard to when the pilot will be scheduled for reserve.

Once the Solver completes building regular and reserve lines for the position, the planner is notified and the lines are published.

3.4 Crew Interface Operation

3.4.1 Welcome Page

The Welcome Page is the first screen that appears after being passed into the PBS portal from MyMesaba. Any news or messages that may affect the current bid period are displayed here.

MESABA	AIRLINES		Crew l	nterface		
Bid Sessions	▼ Tools ▼ Rep	orts 🔻 Help	▼ Exit			
	Welcome, A You last visited	PIERSON, I: Thursday 10	KRISTOFER), September 200	M! 9 12:13:51 (CDT)		
	News & Me	essages				
	The October 2009 Pilot PBS Bid Session is now open!					
	This bidding se	ession will rem	ain open until Mo	onday September 14th	n at 0700CDT!	
	PLEASE REMEM	IBER TO SAVE	YOUR BIDS!!!!!			
	The PBS Help D	Desk number is	s 1-888-MSA-4PB	S. That's 1-888-672-4	727.	

3.4.2 **Crew Interface Overview**

SABA AIRLINES Crew Inte	erface	
ssions ▾ Tools ▾ Reports ▾ Help ▾ Exit ◀		A kronos Division
Line PIERSON, KRISTOFER	M 9334 April 2009	$\overline{}$
MSP_SF3_CA	2009-04-01 - 2009-04	4-30
 Your bid for April 2009 was saved correctly. 		
Revision No: 1		
Validation Code: 7A287432247422335C5271684736	43657224	ſ
Last Saved: Thursday 19, March 2009 17:59:00	Central Standard Time	
Bidding Mode: Manual Bidding		
Bid Scope: 🖲 Regular 🔿 Reserve		$\overline{}$
Text View Calendar View Other Opt	tions CDO Line Re	eserve Line Type
1000 pts Reg Desire Weekends Off		Select All
1000 pts Reg Avoid Pairing Class CDO		Unselect All
500 pts Reg Desire Eri to Sup Off		Edit
		Duplicate
500 pts Reg Desire Sun to Fri Off		Delete
50 pts Reg Avoid Deadhead Flights		Delete All
50 pts Reg Avoid Pairing Length In Days greater	than 3	Sort
		/
Option classes: Pairing Requests		
Check-In On Date(s) Check-In On Day(s)		Add
Check-In Time Check-Out On Date(s)		Add default
Check-Out On Day(s)		
Deadhead Flights		
Duty Period Duration Equipment Type		>
International Pairings		
Leg Duration Legs Per Duty Period		
Pairing Class Pairing Length In Dave		
Pairing Length In Duration		
Devis Diselau/Drink As to the	tana tana tan	
Save Display/Print Analyze Aut	Import Stan	laing

- Û Main Menu
- Pilot Information and Bid Validation Area 0
- Ø
- Bid Entry Pad Bid Options Selection Window 4
- Command Buttons 6

3.4.3 Main Menu

The Main Menu bar, located at the top of the Crew Interface page, provides access to most of the functions in PBS through a conventional drop-down menu. The Main Menu selections available are Bid Sessions, Tools, Reports, Help, and Exit.



3.4.4 Bid Sessions Menu

Three types of bid sessions can be accessed when selecting the Bid Sessions drop-down menu: the Standing bid, the current Bid Period, and closed Bid Periods. When a pilot selects a Bid Period, the system displays his position for that Bid Period. The position information cannot be modified by the pilot. It can only be changed by the planner.

	MESABA AIRLINES Crew I										
	Bid Se	essions 🝷	Tools	•	Reports 🝷	Help	 Exit 				
	Line	Standing	Bid	0	ne. PIFR	SON		OFFR I			
April 2009				st v	isited: Thurs	day 19	, March	2009 20:			
		February	2009	9 Maaaaaa							
January 2009					x messag	es					
		Aug2008		airin	igs have bee	en publi	shed fo	r January			

3.4.4.1 Standing Bid

The Standing Bid is a "backup" bid made up of general bid preferences which the Solver will use for a Bid Period if the pilot has not entered a Specific Monthly Bid for the Bid Period. The pilot can enter a Standing Bid via the Crew Interface Bid Sessions Menu at any time – even when a Monthly Bid is closed.

Ideally, the Standing Bid should contain the bid options that represent the pilot's preferred working conditions from month to month. The Standing Bid can also be used as a template for any bid period. A pilot can import his Standing Bid into a specific monthly bid. This action replaces the content of the monthly bid with the entire content of the Standing Bid. Bid options in the standing bid with specific dates that are outside of the current bid period are <u>not</u> imported when the rest of the Standing Bid is imported. This feature allows a pilot to put all regularly occurring date off requests (birthdays, anniversaries, holidays etc.) in his

Standing Bid so he will remember to bid them (if the bid is imported) or so they are bid for him automatically if he does not enter a monthly bid. Some bid options are not available in the Standing Bid. These include bid options specific to each monthly pairing database. If a pilot has saved a Specific Monthly Bid, the Standing Bid will be ignored for that bid period. This includes bid options that are saved in the Early Bid for Short Term Training Events.

When a pilot starts a new bid, the system either loads the pilot's Standing Bid (see the Tools Menu), or automatically prompts the pilot to base the new bid on the pilot's standing bid file. It is not possible to cut and paste the content of one bid into another bid. It is important to remember the system will only use bid options from the current Specific Monthly Bid bid *or* the Standing Bid, not both or parts of both.

Note: The system will only use bid options from the current Specific Monthly Bid or the Standing Bid, not both or parts of both.

Note: The first time the PBS system is used the Standing Bid is empty. All pilots should enter a standing bid on the system upon completion of PBS training.

3.4.4.2 Bid Periods

Bid Periods are displayed by month and year under the Bid Sessions menu. Selecting a Bid Period (or bid session) allows the pilot to enter bids for the Bid Period and to display a previously saved bid for the current period. Access to the current Bid Period means the session for either the Early Bid (for Short Term Training Events) or the Monthly Bid (for flying or reserve assignments) is still open.

In addition to the Standing Bid and the current Bid Period, pilots also have access to the previous periods' bids. The previous months' bids are read-only and cannot be changed. Crew Planning does have the option to list future Bid Periods in the Bid Session menu. Bids for future Bid Periods can be entered however there will be no pairing information for those bid periods. For example, if you wish to enter a bid for December 25th off, you can do so in your standing bid, even if not bidding for the December bid month.

Each of the bids entered for a Bid Period can be printed.

3.4.5 Tools Menu



The Tools Menu contains links to the Profile page and the Personal Calendar

3.4.5.1 Profile Page

The first time the pilot accesses the Profile page, a message will appear saying, "You have no saved profile." After a pilot selects the available options to edit his profile, the message will indicate the last time the profile was saved/modified.

MESABA AIRLINES	esaba airlines Crew Interface								
Profile									
PIERSON, KRISTOFER M									
Your profile was last saved: Friday 20, March 2009 13:54:00									
Bid mode: manual 💌									
Load standing bid by default?									
	Continue Cancel								

The Profile page has options to have a "default" setup for when a pilot enters his bids each time a Bid Session is accessed. These include selecting which Bid Mode is used as default (manual or automatic), and whether or not PBS should load your Standing Bid automatically each time you start a Bid Session.

3.4.5.2 Personal Calendar



The Crew Interface features a personal calendar in which the pilot can view the current Bid Period as well as subsequent and past Bid Periods. Some of your schedule data from the previous month's calendar is available for viewing, so that you can plan around carry-in pairings or other duty assignments. However, it may not be current! Do not use the Personal Calendar as a source of detailed information about your schedule. CrewTrac is the only online source of current, up-to-date schedule details.

In addition to activity carried in from the previous month, a pilot's Planned Activities – both duty and non-duty – are displayed. This includes awarded vacation blocks, training, and leaves of absence. They are automatically placed in the calendar based on the pilot's record within the Planner Interface and cannot be modified in the Crew Interface. When displaying the activities in the calendar, the activity code, activity start and end time, and daily credit value (if applicable) will be displayed for each activity day.

Pilots may also utilize the calendar to record personal notes to remind themselves of non-work related activities they may wish to bid around. The information is encoded and stored with the rest of the bid information upon saving the bid. These pilot-defined notes are not used by the PBS system to award lines. There is a 300 character limitation on the length of a note that can be entered for any one day.



If you hover your mouse pointer over the personal note icon, as shown above, the personal note is revealed. By clicking on the icon, you can edit the note. The personal calendar can be printed by viewing the calendar and then selecting your web browser's print function (typically, Ctrl-P).

3.4.6 Reports Menu

Altitude® PBS has a versatile reporting system in which reports generated by PBS itself, as well as reports generated outside of PBS, can be made available for display in the Crew Interface. Some reports are published in PDF format, requiring the installation of the Adobe Acrobat Reader on your computer. (If you do not have Acrobat Reader installed, visit <u>www.adobe.com</u>. The program is free.)



The reports available in this menu are published to assist the pilot in constructing his bids. Traditional Bid Packages will still be published and delivered to pilot mailboxes and posted on the MyMesaba website.

3.4.6.1 Single Line Reports

Single Line Reports are published when the Monthly Bid has closed and the Solver has completed its line building process. This report displays a pilot's awarded line. It also displays each bid option used for the month, the score that bid option attained, and the total score for the line.

You can access the Single Line Report by logging into the PBS Crew Interface and selecting Reports -> Single Line Reports from the Menu Bar.

The top of the report contains three sections: Line Display, Pairing Display, and Bid Summary.

Line Display

The Line Display section shows a pilot his awarded line in a summary format that includes "at a glance" information.



Bid Period

The Bid Period published in the report is listed here, indicating the start and end dates of the bid period.

Header Line

The header line identifies the pilot, and monthly statistics of the awarded line. The fields include:

- Employee Number
- Employee Name
- Sen (seniority number)
- Line (number of line awarded i.e., 22 would be the 22nd most senior line awarded)
- CR (Total Credit Time)
- BLK (Total Block Time)
- TAFB (Total Time Away From Base)
- DAYS OFF
- C/O CR (Carry-out Credit)
- C/O BLK (Carry-out Block)
- LINE: (type of line awarded REG will designate a regular line, reserve lines will be designated by the reserve contact period awarded i.e., P1, P2, P3)

<u>Activity Line (Calendar)</u>

														1			
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR
Act	M3006	M3006	M3006	M3040	M3040									RGI	RGI	RGI	RGI
Lay	STC	STC	MSP	HIB	MSP				I	I							
Rpt	10:16			12:10					I	I				12:00			
Rel			18:22		18:31				I	I							17:0
Cred			15:37		10:56				I	I							16:0
Qual	CA	CA	CA	CA	CA												

The Activity Line – or calendar in "Gantt format" – is where every trip and activity is published. Across the top row is the calendar for the bid month. Below that is a row containing six information fields that may contain information for each date:

- Act Activity code for the date. Typically this will be the pairing number, but also could also be any other activity code (i.e., RGI, TVL, LOA, et cetera)
- Lay Layover Station
- Rpt Report (show/duty on) time for an activity. Listed only for the first day of a multi-day pairing.
- Rel Release (duty off) time for an activity. Listed only on the last day of a multi-day pairing.
- Cred Schedule Credit for the activity. On a multi-day pairing this will be listed on the last day.
- Qual Seat qualification for a pairing activity (CA or FO).

Summary Line

The Summary Line contains a listing of each pairing awarded on the line, and the Schedule Credit associated with each. If the pairing is a carry-in, the total credit for the pairing is listed, followed by the credit in the report's bid period in brackets. Carry-out parings will have their full credit listed.

Pairing Display

The pairing display section shows the trips that appear on a pilot's awarded line in detail. Each pairing will be separated by a heavy black line.

EFF 07	/06/09 THRU	07/29/	09				ID M305	0			
EQP	FLT# DPT	ARV	DPTR LST (GMT)	ARVL LST (GMT)	TOG	ML	FTM	ACM	DTM	СТМ	IND
SEC	3021 MSP	ALO	0925 (1425)	1041 (1541)	00:20		01:16	01:16		01:14	
SEC	3022 ALO	MSP	1101 (1601)	1214 (1714)	00:56		01:13	02:29		01:08	
SEC	3265 MSP	CWA	1310 (1810)	1426 (1926)	14:49		01:16	03:45	06:16	01:09	
	CANDLEW	OOD	SUITES - 803 IND	JSTRIAL PARK DE	RIVE ROT			71	5-355-89	00	
SFC	3037 CWA	MSP	0515 (1015)	0625 (1125)	00:55		01:10	01:10		01:11	
SFC	3010 MSP	ATW	0720 (1220)	0845 (1345)	00:23		01:25	02:35		01:23	
SFC	3011 ATW	MSP	0908 (1408)	1040 (1540)	00:55		01:32	04:07		01:24	
SFC	3125 MSP	STC	1135 (1635)	1216 (1716)	17:09		00:41	04:48	07:46	00:40	
	BEST WE	STER	KELLY INN - 100	4TH AVENUE S S	ST CLOU			32	20-253-06	06	
SFC	3249 STC	MSP	0525 (1025)	0609 (1109)	01:11		00:44	00:44		00:41	
SFC	3037 MSP	FSD	0720 (1220)	0843 (1343)	00:22		01:23	02:07		01:21	
SFC	3036 FSD	MSP	0905 (1405)	1018 (1518)	01:17		01:13	03:20		01:13	
SFC	3230 MSP	EAU	1135 (1635)	1223 (1723)	00:20		00:48	04:08		00:46	
SFC	3224 EAU	MSP	1243 (1743)	1335 (1835)	01:35		00:52	05:00		00:47	
SFC	3211 MSP	RHI	1510 (2010)	1626 (2126)	00:20		01:16	06:16		01:08	
SFC	3212 RHI	MSP	1646 (2146)	1805 (2305)			01:19	07:35	13:40	01:13	
T/D-	BID- 15	5:47 F	TM-16:08 TMA-	58:10							

Header Line:

- Pairing Effective Dates (EFF 07/06/09 THRU 07/29/09) If there are any exceptions, they will be listed with the code "XC" preceeding the date of exception. If no exceptions are listed, it can be assumed the pairing operates daily between the effected dates listed.
- 2. Pairing Number (ID M3050) In this example, "M3050" is the pairing number.

Label/Leg Line:

- 1. EQP: equipment code (SFC, CRJ, or CR9)
- 2. FLT#: flight number
- 3. DPT: departure station
- 4. ARV: arrival station
- 5. DPTR: departure time includes local station time (LST) and GMT
- 6. ARVL: arrival time includes local station time (LST) and GMT
- 7. TOG: time on ground total time between ARVL and DPTR leg-to-leg. For layovers, this is still calculated from ARVL to DPTR, and *does not* account for duty-on/duty-off times.
- 8. ML: (not used)

- 9. FTM: flight time for deadhead legs 00:00 is displayed
- 10. ACM: accumulative flight time this number increases with each addition leg that flight time (FTM) is scheduled. ACM "resets" with each duty period.
- 11. DTM: duty time calculated from report time thru to release time for each duty period
- 12. CTM: credit time schedule credit for the leg (which in the case of a pairing is equal to the pay credit or "SAT")
- 13. IND: (not used)

Summary Line:

- 1. T/D: total # of days, i.e. the number of days over which the pairing spans.
- 2. BID: pairing bid time the total schedule credit for the pairing.
- 3. FTM: pairing flight time (total of all non-deadhead legs in the pairing)
- 4. TMA: time away TMA is Time away and it is calculated from report time thru to release time.

Bid Summary

The Bid Summary section of the report will show the bid used to award the line. In addition to listing each bid preference contained in the bid, it also shows how each bid preference scored.

Bid Type: Specific Monthly Bid Validation Code:7B7C4A36527822335C54696C4B345A657224 Weighted Preferences: OCC. BIDS SCORE 66.00 66.00 1 pts Desire Credit 19.00 19,000.00 1000 pts Desire Days Off Total Score = 19,066.00 Other Options: Allow Single Day Off Enable Maximum Line Range Reserve Line Types: P2, P1, P3 Partners: Rotation (Flight) Date Qual Name M6058 (3322) 2009/03/31 20:10 CA LOFGREN 2, MERLE P 1. Bid Type: Lists the type of bid used to award the line (Specific Monthly Bid, Standing Bid, or Default Bid) 2. Validation Code: The code that identifies the bid used to award the line 3. Weighted Preferences: Lists the bid preferences contained in the bid and how they scored. OCC = number occurrences that the bid preference was scored on the line. SCORE = resultant score of the bid preference. BIDS = description of the bid preference. 4. Total Score: The sum of all bid scores awarded on the pilot's line. 5. Other Options: Lists out any "Other Option" bid preferences if they were requested in the bid

6. Reserve Line Types: Lists the reserve line contact period preferences, in order of preference, if entered on the pilot's bid.

7. Partners: List the CA or FO the pilot is paired with on the schedule.
3.4.6.2 Training Award Reports

Similar to the Single Line Report, the Training Award Report will be published when the Early Bid has closed and the Solver has awarded all Short Term Training events for the Bid Period.

> MSP_CR9_CA 08-01-2009 - 08-31-2009

000941 CHRISTOFF 2,DAVID V S			Sen: 29 Line: 3				8	CR: 24:00			BLK: 00:00			TAFB:		DAYS OFF: 25							
	01 SA	02 SU	03 MO	04 TU	05 WE	06 TH	07 FR	08 SA	09 SU	10 MO	11 TU	12 WE	13 TH	14 FR	15 SA	16 SU	17 MO	18 TU	19 WE	20 TH	21 FR	22 SA	23 SU
Act Lay Rpt Rel Cred Qual											RGI 12:00	-	-	- 17:00 16:00									P1I 17:00

Bid Type:Standing Bid Validation Code:7C7C4A65577A22335C5A7169452243657224

Weighted Preferences:				
OCC.	SCORE			BIDS
0.00	0.00	500pts	Avoid	Check-In Time Between 00:01 and 09:00
0.00	0.00	50pts	Avoid	Pairings
0.00	0.00	100pts	Avoid	Consecutive Working Days greater than 4
0.00	0.00	200pts	Desire	Line Credit between 75:00 and 85:00
-1.00	-200.00	200pts	Avoid	Work Period Check-out Time After 19:00
0.00	0.00	400pts	Avoid	Consecutive Days Off less than 3
0.00	0.00	25pts	Desire	Maximize Hours Per Day
0.00	0.00	500pts	Avoid	Pairing Length In Days less than 3 (excepting Phantom Days)
0.00	0.00	1000pts	Desire	String of Dates Off Jun 08 To Jul 31
0.00	0.00	1000pts	Avoid	Pairing Class CDO
25.00	25,000.00	1000pts	Desire	Days Off
3.00	3,000.00	1000pts	Desire	String of Days of Week Off Thu To Sat (Aug 27 - Aug 29)
3.00	3,000.00	1000pts	Desire	String of Days of Week Off Thu To Sat (Aug 20 - Aug 22)
0.00	0.00	1000pts	Desire	String of Days of Week Off Thu To Sat (Aug 13 - Aug 15)
3.00	3,000.00	1000pts	Desire	String of Days of Week Off Thu To Sat (Aug 08 - Aug 08)

Total Score =33,800.00

The short term training event awarded to a pilot from the Early Bid will be displayed on the Activity Line, including the scheduled start and stop times for the event. The Bid Summary is displayed with each bid scored on the line with only the training event(s) awarded. It *does not* consider what other duty (flying or reserve) may be awarded when the Final Line Award is published from the Monthly Bid.

3.4.6.3 Pairing Reports

The pairing reports displayed in the Crew Interface are generated directly from AD OPT's Altitude Pairing software. The codes and layout are very similar to the pairing display of the Single Line Report.

TRIP #46 D900	3 (OL) [1,1,2] DTW:	:3 effecti	ve JUL 01-	JUL 01 n	o exceptions.				
DAY FLT#	DEP ARR DEP	ARR BLK	SAT TOO	DUTY	CREDIT LO	CODE F	/24 TAFB CA	T RL A/C CREW COMP	
RPT	(10)06:10)	1h00						
We 1 NW 01439	DTW MSP (11)07:10	(13)08:03 1h53	1h48 1h	02	0h54		2h53		
We 1 05739	MSP SLC (14)09:05	5 (17)11:00 2h55	2h55 2h	30	2h55	2	h55 6h50 DOM	4 CR9	[1,1,2]
We 1 05731	SLC BOI (19)13:30	(20)14:37 1h07	1h09	*	1h09	4	h02 10h27	CR9	[1,1,2]
		(20)14:52 4h02	101	15 10h42	4h58 (L)				
LO					14h08(S1)				
	(11)05:00)	0h30						
Th 2 03544	BOI MSP (11)05:30) (14)09:30 3h00	2h57 Oh	40	2h57	6	h37 28h20 DOM	4 CR9	[1,1,2]
Th 2 03544	MSP IND (15)10:10	(16)12:52 1h42	1h46 Oh	30	1h46	5	h57 30h42	CR9	[1,1,2]
Th 2 03509	IND DTW (17)13:22	2 (18)14:35 1h13	1h11		1h11	7	h02 32h25	CR9	[1,1,2]
RLS		(19)15:05 5h55	i 01	30 8h05	5h54(L)				

TAFB: 32h55 Block Time: 9h57 Credit Time: 10h52(D) &Synthetic: 9.2127303

3.4.6.3 CDO Line Reports

Because CDO lines are constructed manually by Crew Planning, and then bid on by line number in the PBS Crew Interface, the lines need to be viewable to pilots. A "Category Line Report" for CDO lines in your position will be posted in this area of the Reports Menu.

Period: January 2009 Category: MSP_SF3_	CA													Ca	teg	ory	CD) Lii	ne Re	por	rt													Da	te: 2009-	Page: 1 03-11 10:19
	01	02	0	3 04	0	5 (86	07	68	09	10	11	1	2	13	14	15	16	17	1	8	19	20	21	22	23	24	25	26	27	7 2	8	29	30		
	T	F	s	s	N	1	т	W	Т	F	s	s	N	1	т	w	Т	F	s	5	5	М	т	W	Т	F	s	s	M	Т	· v	V	т	F		
an achtia bigon deprin antu antu antu antu	at as al	20:00 20:00 05:15 4:00	CA 20:00 05:15 100	20 32.20 81.55 4 46				-	CA 88000 _ 20:20 98:55 4:86	CA 58000 _ 29.99 15:18 4:18	CA 38000 20:00 10:13 41:26			20:1 10:0 10:0	C. U_ <u>51</u> 5 29 68	200	CA 8800 29:15 19:00 41:33					2 24 7	A 2003 189 18	CA 0200 - 28:15 10:05 11:04	28:15 69:66 41:33			-	0280 . 2020 00:55	CA 20:30 20:30 41:00					B=51H51 C=57h14 T=177h18 Cin=8h00 Dott=11	BP=51h51 CP=57h14 TP=177h18 Cout=0h00
se activité lagrone oregorne arriv arriv	at a a al					CA _200 _200 _2000 _2000 _2000 _02:12 _4700	0 _0	5A 000 _ 1000 _	CA 8808 _ 4010 4010 4010	CA 8200 81.55 40100				CA _320 _49/2 e0:51 +hei	0_00		CA 32000 . 	CA 3200 49:10 97:12 4020					2000	CA 3202 . Arren Ni:13 4102	CA 03200 48115 10:05 4794				-	CA 0300 49:10 47:02	CA _0320 45:00 66:15 45:00	CA _030 _0712 4000	CA 0_030 0_030 0_030 00:11 41/9	•	B=52h18 C=81h14 T=185h86 Cin=8h80 Doff=11	BIP=52h18 CIP=81h14 TIP=185h86 Cout=0h88
Line: 2																																				
acti file layove departu	a n		60 80 20:15	225	2000						8200 20:20	8200	8100 2925	620 29-1	ə ,				8200 2023	2200 2200	810 312	0 0 9 3	200				0320 28:25	0000	0120					810	B=50H06 02-80H12 T=188h22	BiP=50h08 CiP=80h12 TiP=179h28 Cout=9h93

In this report, the lines are displayed in a "Gantt Format" where the dates run horizontally. The line numbers are displayed in the far left column. Each pairing is represented by a bar on the chart.

3.4.6.4 CDO Line Awards Report

The PBS solver is used to award CDO lines that are manually constructed by Crew Planning. Because this process is outside of the solution used for regular and reserve lines, a separate report is published listing the names of pilots who were awarded CDO lines and which line number they were awarded.

Bid Period: Scenario: Bid Snapshot: Category: Report date: Generated by:	July 2009 July Paral Current MSP_CR9 07-03-2009 Patrick	lel #2 _CA 9 14:49				
Crewmember				Bids	and A	ward
Category	Seniority	Staff Id	Name	Bids	Any	Line Granted
MSP_CR9_CA	439	12576	KELLY 2, MICHAEL L		Ν	2
MSP_CR9_CA	442	11761	LEBRUN 2,JOHN P		Ν	3
MSP_CR9_CA	447	12586	LAZERTE 2, BRADLEY D		N	4
MSP_CR9_CA	449	12585	RICHTER 2, ROBERT R		Ν	1
MSP_CR9_CA	460	12617	SCHAFER 2, JOSHUA R		Ν	5

3.4.6.5 Training Slot Reports

The available Short Term Training Event slots for bid in the current Bid Period are listed in this report.

Bid Period: Scenario: Category: Report date: Generated by:	August 2009 August 2009 F MSP_CR9_CA 06-29-2009 16 Patrick	Parallel A :07		
Category	Slot Type	Slot Name	Start Date	End Date
MSP_CR9_CA	RFI	Brief CR9 1	2009/08/03 13:00	2009/08/04 21:00
MSP_CR9_CA	RGI	Room 1015	2009/08/04 12:00	2009/08/07 17:00
MSP_CR9_CA	RGI	Room 1015	2009/08/04 12:00	2009/08/07 17:00
MSP_CR9_CA	RGI	Room 1015	2009/08/04 12:00	2009/08/07 17:00
MSP_CR9_CA	RGI	Room 1015	2009/08/04 12:00	2009/08/07 17:00

3.4.6.6 Category Line Report

The Category Line Report displays all of the PBS awarded schedules in a position, sorted in seniority order. The benefit of this report is being able to see, in a summary format, all of the schedules in a position and compare them.



The far left column and right columns contain summarized information for each pilot's line. The center of the report displays the activities awarded on a pilots line in an format of the Activity Line of the Single Line Report.

Left Column

BOCHE 2, TIMOTI	HYW ^{seat}
Emp Id: 2731	activities
Sen.: 123	layovers
	arrival
	aredit
Line: 19	

The left column identifies the employee, the employee's ID number, seniority number, and the line number he was awarded. There are also labels for the information provided in the activity line portion of the report (seat, activity, layover, departure, arrival, credit).

Activity Line



The Activity Line portion of the report shows the activities on the pilot's line. Each one is displayed by a tile which is placed on the line in a relative position to the time frame in which the activity takes place. For example, if a pairing has a report time after noon on a date, the tile will be placed somewhere on the right hand side of the date box.

	CA
	M6015
D	SM FSD
06:10	10.00
	15h03

In the example at left, the activity tile is a pairing (M6015). The activity code is always printed on the tile. The additional activity information (as labeled in the left column) is placed around the tile. For this example, the Seat = CA, Layovers = DSM and FSD, Report = 06:10, Release = 10:50, Credit = 15h03.

Right Column

B:68h12 BiP:68h12 C:96h13 CiP:75h13 T:350h26 TiP:267h52 Cin:0h00 Cout:0h00	In the right column, a summary of the line characteristics is given. Here is a listing of the abbreviated codes used:
Doff:17	B: Block
	C: Schedule Credit
	T: Time Away From Base (TAFB)

Cin: Carry-In Schedule Credit

Doff: Days Off

BiP: Block in Period (block hours within the dates of the bid period only)

CiP: Schedule Credit in Period (within dates of the bid period only)

TiP: TAFB in Period (within dates of the bid period only)

Cout: Carry-Out Schedule Credit

3.4.7 Help Menu



The Help Menu allows the pilot user to access an online User Manual (a quickreference type help file provided by AD OPT, not this manual), a compilation of any news or message items posted on the PBS by Crew Planning, the current software version information, and links to support resources such as the email address and phone numbers for Crew Planning and the ALPA PBS Help Desk.

3.4.8 Exit

MESABA AIRLINES	Crew Interface	
Bid Sessions 🔻 Tools 👻 Report	s 🔻 Help 👻 Exit	

When "Exit" is selected from the Menu Bar, the user is logged out of the Crew Interface. If you attempt to exit before saving an open bid session you modified or created, the system will prompt you to save before exiting.

3.4.9 Bid Session Interface

When a Bid Session is selected from the Main Menu, the session will open up in a either the current window or an additional window/tab. The interface you utilize to bid for the session is comprised of three main sections: Pilot Information and Bid Validation Area, Bid Entry Pad, and Command Buttons.

3.4.9.1 Pilot Information and Bid Validation Area

ME	SABA AIRLINES	Crew Interface	
Bid Se	essions 🝷 Tools 🝷 Rep	oorts 🔻 Help 👻 Exit	
	Line	PIERSON,KRISTOFER M 9334 April 2009 MSP_SF3_CA 2009-04-01 - 2009-	-04-30
\prec	Revision No: Validation Code:	1 7A287432247422335C527168473643657224	>
	Last Saved: Bidding Mode:	Thursday 19, March 2009 17:59:00 Central Standard Time Manual Bidding	

The Pilot Information and Validation Area displays the pilot's name, employee number, position, the current Bid Period, and the dates the Bid Period encompasses.

In the gray shaded area, the following fields are updated each time the Bid Session is modified for the active Bid Period:

Revision Number:	This shows how many times you have saved this bid.
Validation Code:	This validation code contains the encoded date and time at which the bid was saved.
Last Saved:	This provides the date and time when the last bid revision was saved.
Bidding Mode:	This indicates which bidding mode was used for the saved bid.

Note: If no validation code is listed, your bid has not been properly saved!

3.4.9.2 Bid Entry Pad

The Bid Entry Pad is located below the Pilot Information and Bid Validation Area, and divided up into five separate tabs. Each tab has a different functionality for bid entry purposes.

3.4.9.2.1 Text View

	Calendar View Other Options CDO Line	Reserve Line Typ
1000 pts Rd 1000 pts Rd 500 pts Rd	g Desire Weekends Off Avoid Pairing Class CDO g Desire Fri to Sun Off g Desire Sun to Fri Off Avoid Deadhead Flights Avoid Pairing Length In Days greater than 3	Select All Unselect All Edit Unplicate Delete Delete All Sort
Dption classes: Consecutive Days (Day Of Weak Off	ate and Time Off Requests 💌 🕒	Add

When a Bid Session is loaded, the Bid Entry Pad defaults to the "Text View" tab and the following controls are presented:

1. Bid Scope Selector

At the top of the pad, the pilot can select the scope of bid options between regular and reserve lines with a radio button selector.

Note: The Bid Scope Selector is a common control shown in all tabs of the Bid Entry Pad. For brevity, we have not repeated its description in the other tabs below.

2. Bid Entry Tabs

Just below the Bid Scope Selector is a row of tabs which switch between different areas of the Bid Entry Pad.

3. Text View Bid Controls

This column of seven buttons on the right side of the pad is used to control the list of bids the pilot has selected for the session. This includes any bids entered in either the Text View or the Calendar View.

4. Bid List

This window shows the list of bids that have been selected for the current Bid Session by the pilot. Each bid is listed with its weighting, its bid scope, and the request. The checkbox next to each bid allows the pilot to select the bid for manipulation with the Text View Bid Controls.

5. Bid Option Class Selector

This drop-down menu allows the pilot to switch between the different Bid Option Classes available for the Bid Session. The bids available in each class for the Bid Session will appear below in the Bid Options Selection Window.

6. Bid Options Selection Window

This window shows the bid options available in the selected Bid Option Class in the current Bid Session. The pilot simply clicks on the name of a bid option and then clicks on the "Add," or "Add Default" buttons at the right of the window to add the bid option to the Bid List.

7. "Add" and "Add Default" Buttons

These buttons are used to add a selected bid option from the selection window to your Bid List. When "Add" is clicked, the pilot is taken to the Bid Refinement Window to allow the pilot to enter and edit bid criteria (such as weighting, specific dates, durations, pairing numbers, etc). If the "Add Default" button is clicked, the bid option is added to the pilot's bid list with default scoring.

3.4.9.2.2 Calendar View Tab

	Text Viev	v Cal	endar View	Other (Options	CDO Line	e Rese	erve Line Type	
	April 2009: 2009-04-01 - 2009-04-30								
	Sun	Mon	Tue	Wed	Thu	Fri	Sat		
				25	26	27	28	Default Score: 50	
2	29	30	31	1	2	3	4 📝		
6	5	6	7	8	9	10	11		
6	12	13	14	15	16	17	18 🔁		
6	19 📝	20	21	22	23	24	25		
	26	27	28	29	30	1	2		

The Calendar View offers an alternate way to view and enter date-related preferences. These preferences are only a subset of the bid options in the Crew Interface. By selecting specific date(s) in the bid calendar, pilots can enter these date-related bids. Any date-related bids that have been entered are then displayed on the bid calendar as icons. All bid options that are supported in the Calendar View can also be entered in the Text View.

The bid calendar shows days in the current bid session. In addition to displaying the pilot's day/date-related bids, it also displays preassigned activities and the personal notes in the same fashion as in the personal calendar.

Note: Pilots should be careful to not confuse this alternate method of entering bid options with the Personal Calendar which offers a view of the pilot's Planned Activities and personal notes.

By hovering the mouse pointer over any of the icons on the calendar, a description of the bid, activity, or personal note is displayed:



By hovering the pointer over any of the dates in the calendar, a menu appears to enter a bid related to that date. Selecting a bid option from this menu sends the pilot to the Bid Refinement Window for that specific bid.

					©	''
7	Single date	bids	Specif	fic Date Off		11
	Duration bi	ds I	Work	On Date		3
	Set as first	date	Specif	fic Pairing On I	Date(s)	
1	Edit Person	al Note	Partia	l Date Off		18
			Statio	n Layover Du	ration On Date	3
			Check	k-In On Date(s	;)	
2	1	22	Check	c-Out On Date	(s)	25
					@	()

3.4.9.2.3 Other Options Tab

Т	ext View Calendar View Other Options CDO Line Reserve Line Type
	Allow Single Day Off Allow Single Day Off
	Enable Maximum Line Range Enable Maximum Line Range
	Allow PC or RFT Within 7 Days Following Vacation Allow PC or RFT Within 7 Days Following Vacation
	Ready Reserve AM Shift Preference Ready Reserve AM Shift Preference
	Ready Reserve PM Shift Preference Ready Reserve PM Shift Preference
	Non CDO Pairing First Out Preference Non continuous duty overnight Pairing First Out Preference
	Non CDO Pairing Last Out Preference Non continuous duty overnight Pairing Last Out Preference
	CDO Pairing First Out Preference continuous duty overnight Pairing First Out Preference
	CDO Pairing Last Out Preference continuous duty overnight Pairing Last Out Preference
	Volunteer To Perform Ready Reserve Volunteer To Perform Ready Reserve
	Volunteer To Perform Out Of Base Reserve Volunteer To Perform Out Of Base Reserve
	Allow For Trip Substitution Allow For Trip Substitution
	Save Display/Print Analyze Automatic Bidding Import Standing

The Other Options Tab allows a pilot to specify certain criteria for his Monthly Bid that applies "globally" for his entire line. In other words, the options selected here will be applied to the pilots awarded line regardless of the entry of any other bid option.

The Other Options bids can be saved in the Standing Bid, so that you can import your typical selections with every Bid Period.

3.4.9.2.4 CDO Line Tab

Text View Calendar View	Othe	r Options	CDO I	Line	Reserve Li	ne Type
In the left box is the list of available lines. Select line(s) and use the right-arrow buttor add the selection to your bid.	n to	In the right b decreasing p Select line(s) remove the s Use the "↑" a your bid	oox are the riority. and use th selection fro and "J" butt	lines in yo e left-arro m your bi ons to re-	our bid listed ow button to d. prioritize line	in es in
Desire ANY CDO line if none of my selections is available.	-> <- either Show	list and press	s the followi	ng button		1
Save Display/Print Analyze		 Automatic B 	idding	Import	Standing	

The CDO Line Tab allows the pilot to bid for CDO lines if he desires to. *If you do not wish to have a CDO line, do not utilize this tab when putting your bid together!* In the left box is a list of the available CDO Lines that Crew Planning has published for bid. In the right box is the ordered list the pilot will submit as his bid for CDO Lines (which is initially blank).



The pilot selects (clicks on) a desired CDO line number from the left box and then clicks on the -> button to place that line number in the ordered list in the

right box. The ordered list is ranked from most desirable (first line listed) to least desirable (last line listed). The up and down arrow buttons next to the right box can be used to reorder the list of lines being bid. Simply click on a line number and then click the appropriate arrow button to move it up or down in the list.

If you wish to view the details of the CDO line, simply click on a line number (in either the left or right box) and then click the "Show Details" button below the boxes. The CDO Line Detail window will pop up. The CDO line is broken down by trip in this view.

If a pilot wishes to be assigned any CDO line, without any preference to the published CDO lines, he may indicate that by checking the box shown in the figure below:



This option may be selected with or without an ordered list of desired published CDO lines. **NOTE: By checking this box without also bidding for any of the published lines, your bid for a CDO line will be considered after any specific bids for the published lines, possibly out of seniority order.**

When the Solver awards a CDO line to a pilot based upon the selection of the "Desire ANY CDO Line" option, it will:

- Award the numerically lowest CDO line number available
- Award CDO lines to other pilots which you did not bid for, but were specifically requested by other pilots first, even if they are junior to you
- Possibly award non-published CDO lines that were created after the published lines were awarded.

Also note that if the Solver is unable to award you a CDO line (due to unavailability of a line at your level of seniority), you will be considered for a regular or reserve line. So, make sure that you enter a full bid for the Bid Period with options for regular and reserve lines in addition to your CDO line bids.

3.4.9.2.5 Reserve Line Type Tab



For the purposes of awarding which reserve period will be assigned to a reserve line in PBS, a pilot may enter an ordered list of preferences for which reserve duty period they wish to be assigned for their *entire* line. Because the awarded duty period will apply to the whole line, the context of this bid has been named "Reserve Line Type."

Similar to the CDO Line Tab, the available reserve duty periods are listed in the left box. The pilot selects (clicks on) a desired reserve period from the left box and then clicks on the -> button to place that line number in the ordered list in the

right box. The ordered list is ranked from most desirable (first period listed) to least desirable (last period listed). The up and down arrow buttons next to the right box can be used to reorder the list of periods being bid.

The Reserve Line Type bid can be saved in the Standing Bid, so that you can import your typical selections with every Bid Period.

3.4.9.3 Bid Refinement Window

Each time you select a bid preference to add to your bid, it will be added or modified in the Bid Refinement Window:

Score: 5	0 pts O Reserve down to
Remove	Work On Date
	Description Request to (not) be awarded work (pairings) that touch a certain date.
	Scoring Positive score applies if any granted pairing touches the date that you desire work on. Scores negatively if any granted pairing touches the date you want to avoid work on.
Scope: Reg	Example 500 pts Avoid Work on 12/25
	Continue Cancel

Along with entry boxes for entering your preferred weight/score for the bid, the window may also include options to select the bid as a "Conditional Bid" (a.k.a. "Reserve Down To"), or denote it as a bid to be awarded per the "Max NN" function.

3.4.9.4 Command Buttons



Save Button

The Save button records the current bid and/or changes made to the personal calendar, profile, standing bid, etc. Pilots should develop the habit of saving their work frequently to avoid losing their defined bid options. The Crew Interface times out after 30 minutes of inactivity and any unsaved work will be lost. If the pilot chooses to change these options at a later time, he can always edit them until the bid period closes.

Display/Print Button

The Display/Print button prints the contents of the bid. The following information is displayed/printed:

- File number
- Date/time

Note: The time is provided by the web server, not by the actual machine the pilot is working on. The time zone used is always the Central Time Zone.

- Validation code
- Name of the Bid Session (e.g., "January 2005" or "Standing Bid")
- Selected bid options (grouped by type of line: regular, reserve) with their weight or level
- Selected Other Options

When the Display/Print button is clicked, the Crew Interface prompts the pilot to save the bid so the printout shows the latest validation code.

Additional information viewed in the Crew Interface can be printed using the web browser print function. This prints whatever is visible in the browser.

Note: Once the bids have closed, the pilot's bid is locked and the pilot can make no further modifications.

Analyze Button (Bid Analyzer)

Clicking the Analyze button opens the Bid Analyzer in a separate browser window. The Bid Analyzer is a tool designed to help the pilot evaluate his bid. For details on how to use the Bid Analyzer, see page 69 later in this manual.

Automatic/Manual Bidding Button

Clicking this button changes the way the pilot's bid options are weighted. This button always displays the opposite of the bidding mode currently in use (i.e., if you are currently using the Manual mode it will display Automatic). When this button is clicked, a window opens asking the pilot to confirm that he wishes to switch bidding modes. Click OK to change modes.

Note: When switching between Manual and Automatic bidding modes, all assigned weights are replaced with a default value: 50 points for Manual or Medium for Automatic. The pilot should modify the values to reflect his desires.

Import Standing Button

By clicking the Import Standing button, the pilot can replace the current Bid Options with the Bid Options in his standing bid. This provides a base from which to build the current bid. The Import Standing command copies the pilot's standing bid into the active bid, completely replacing any bids that have already been entered. This does not open the standing bid. If you wish to modify the standing bid, you must first open the Standing Bid Session via the Bid Sessions menu.

4 Monthly Bidding Process

4.1 Monthly Bidding Timeline

Note: All times in this section are based on MSP time.

With the implementation of PBS the Schedule and process for bidding and awarding has been modified. In PBS Pilots will now bid for Short Term Training events. Below is an outline of the new names for the individual bid, a short description of what is in the bid and the timeline for each of these bids.

4.1.1 Early Bid

The Early Bid includes bidding for Short Term Training (STT), monthly vacation, Time Off WithOut Pay (TOWOP), and Temporary Duty Assignments (TDY). The bid for STT will be done via PBS. Monthly Vacation, TOWOP, TDY bids will be done on the MyMesaba website. The Early Bid typically begins 10 days prior to the Monthly Bid, and ends no sooner than 2200 on the Sunday prior to the Monthly Bid. The award of all Planned Activities from the Early Bid will be posted in Monthly Bid Packages and in various places in the Crew Interface of PBS (i.e. Training Award Reports, Personal Calendar).

4.1.2 Monthly Bid

The Monthly Bid is the bid for the remaining duty activities (trips and reserve) and days off for the Bid Month. The Monthly Bid begins at 1200 on the last Thursday before the 14th of the month prior to the Bid Month. It ends the following Monday at 0700. All bidding for the Monthly Bid is done in PBS. Final Line Awards will be posted no later than 1700 on following Friday. This is accomplished by delivering CrewTrac schedule reports to pilot mailboxes and the publication of Single Line Reports and Category Line Reports in the PBS Crew Interface.

4.1.3 PVD/INV Bid

The Personal Vacation Day (PVD)/Inviolate (INV) bid begins with posting of Final Line Awards and ends no sooner than 0700 on the following Monday. Bids for PVD's and INV's will be accomplished on MyMesaba. Master Schedules with all adjustments from the PVD/INV Bid will be published in CrewTrac.

4.1.4 Sample Bid Month Calendar

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 Early Bid Packages posted and Early Bid Opens	2	3	4	5	6
7 Early Bid Closes 2200	8	9	10	11 Monthly Bid Packages online by 12:00 MSP time and Monthly Bid Opens	12	13
14	15 Monthly Bid Closes 0700	16	17	18	19 Final Line Awards Posted 1700 PVD/INV Bid Opens	20
21	22 PVD/INV Bid Closes 0700	23 PVD/INV Final Changes Awarded by 0700	24	25	26	27
28	29	30	31			

4.2 PBS Bid Sessions

The Altitude® PBS software customized for Mesaba Pilots will accomplish bidding and awarding of both Short Term Training events and all CDO lines, regular lines, and reserve lines. For each Bid Month, a separate Bid Session is opened on PBS. Within each of the Bid Sessions, bids are entered for Short Term Training events and requested line characteristics. In other words, there is not a separate session opened for the "Early Bid" and the "Monthly Bid." Likewise, if you have time off bids listed for when the Early Bid (Short Term Training) solution and award is processed, they will remain on your bid for the Monthly Bid.

Within each Bid Session, three (3) different types of bids will be considered by the Solver to award your schedule:

4.2.1 Specific Monthly Bid

The Specific Monthly Bid is the bid that applies to the current and open Bid Month and related Bid Session. A Specific Monthly Bid will only be applied to one Bid Month. All bid options are available for use.

4.2.2 Standing Bid

The Standing Bid is used by the Solver if the pilot has not entered a Specific Monthly Bid for the bid period. The pilot can enter a standing bid via the Crew Interface at any time. Bid Options that contain specific Pairings/Flights are not available for the Standing Bid. All other Bid Options are available.

4.2.3 Default Bid

The Default Bid is used by the solver if no Specific Monthly Bid has been saved and the pilot's Standing Bid is empty. It is a generalized bid defined by the ALPA PBS Committee for all pilot positions. *The current default bid is "50 points Desire Days Off".*

4.2.4 Bid Type Priorities

PBS will use the Specific Monthly Bid if a pilot has entered one for the current Bid Session. If no Specific Monthly bid is entered PBS will use the Standing Bid. If the pilots Standing Bid file is empty or there is no Standing Bid, PBS will use the Default Bid.

5 Pilot Preferences and Bidding

5.1 Bidding Basics

Pilots create a bid by selecting various bid options, specifying their parameters and giving each one a value (weight). The Solver will use these options and their weights to evaluate the lines that it can build for you. The Solver may have many possible line solutions for you based on your Bid Options. You will be awarded the line that scores the highest. Your score has no affect on another crewmember's line or score.

To successfully bid in PBS you first need to understand what your desired line characteristics are and which characteristics you wish to avoid. Then you need to prioritize these in a list. PBS does not look at your bid options in the order you listed them, it looks at them all at the same time. It is your job to put a priority on the bid options.

To prioritize bid options pilots must assign each option a specific weight. The ratio of the weight between bid options determines the priority. PBS simply wants to give you the highest satisfaction or highest score. The PBS Solver does not care if you get Christmas or weekends off, it only wants to give you the highest score possible.

Successful bidders have a procedure to list out and rank the characteristics they like in their schedule prior to opening the crew interface. One successful method is simply to list on paper what desires and avoids are important and to rank them in order. The bidder then looks at the bid options and determines which ones apply to the characteristics desired. The next task would be to weight the options appropriately.

All bidders should at least think about the following line qualities. You do not have to include bids for each one, but you should decide if they are important:

- > When you work: report and release times, days off
- Where trips sit on your line: back-to-back, breaks less than nn days, home base crew rest, weekends off, string/period off.
- > How much flying: days off, line min/max, desire/avoid credit.

If you do not have a bid for a particular characteristic, the Solver assumes that you do not care about it. For example, if you do not include a bid about Days off, the Solver assumes that days off is not important to you. Don't take this to mean that you need to use every bid in the list. Don't worry about things that are not important to you. **Excessively complex bids can lead to bidding confusion and disappointment.** Most bids can be described with just a few bid options. The fewer bids options you use to describe what is important to you, the better your award will be.

5.2 Desire vs. Avoid

One of the most basic, and important, concepts in PBS is grasping the difference between using "Desire" or "Avoid" to express your preferences. Most bid options allow you to designate the option as either to desire something or to avoid the alternative. While this may seem to be two ways of saying the same thing, in PBS they are really very different – and understanding the difference is crucial to your line award!

Any bid option that begins with DESIRE scores points positively (it adds points to your total score) every time that option is awarded on your line. Since the goal of PBS is to give you the line with the highest total score, using "Desire" tells PBS that you want this feature to appear as many times as possible on your line. It may be pairings, credit, layovers, legs, report times, or whatever. "Desire" indicates that you want as many occurrences of the item as you can get! It says, "I want a lot of this!"

Any bid option that is expressed with AVOID scores negatively (it subtracts points from your total score) every time the stated condition is violated (or infringed upon). By utilizing AVOID bids you are expressing a condition which will penalize the Solver. Therefore, PBS will try to minimize the occurrences of the stated condition. If possible, PBS will try to completely avoid violating this condition, in which case there will be zero points awarded. But if it does violate this preference, it will try to do so the fewest times as possible, thereby minimizing the penalty score.

At first these basic explanations of what Desire and Avoid are saying may seem fairly simple, but there are many serious implications that must be understood. Most pilots fail to grasp these implications initially, but they begin to realize that there is more to understand once they get their first disastrous line award. Seeing the effect on a line is the best way to begin to understand the full meaning of Desire or Avoid. Therefore, we will now examine several examples to demonstrate the full implications of these options.

Example 1:

A pilot who prefers to fly longer legs rather than short legs can state his preference using either of the following bids:

- A: 100 Desire Leg Length Greater than 1h15m
- **B:** 100 Avoid Leg Length Less than 1h15m

To illustrate the difference, enter one of these bids by itself in your PBS bid, then use the Bid Analyzer and see what type of pairings score the highest. Then delete this bid and try the other one by itself and see what it does in the Analyzer. Using Bid **A**, you will notice that the highest scoring pairings are those that have the most legs over 1:15. Also notice that the legs in those pairings are probably not very long, usually just over 1:15. That is because PBS is trying to find the most number of legs over 1:15 in duration. Pairings that have long legs will not have very many legs, but pairings with short legs can fit more legs in a duty period. So rather than being a preference for the longest legs, this bid actually tries to get legs that are just barely over the designated time minimum. It seeks the highest quantity of legs over 1:15, not the longest legs.

Also notice that this bid will not exclude short legs. A pairing with several short legs and 3 legs over 1:15 will score the same as a pairing with no short legs and 3 legs over 1:15.

To AVOID short legs it is better to <u>say exactly that</u> and use Bid B. Bid B will simply try to avoid the legs shorter than 1:15. The highest scoring pairings will be those with no short legs, and they will score 0 (zero). Pairings with the most quantity of short legs will score the most negative. This bid will not try to find you the longest legs. But if you want to avoid short legs, this is the bid you want.

Example 2:

Some of the effects of using Desire vs. Avoid are not evident when using the Bid Analyzer, they can only be seen when looking at the resulting line award. Such bids are referred to as "Non-Participating Bids" in the Bid Analyzer. To illustrate the line award effects of bidding using Desire, consider this bid:

100 points Desire Pairing equal to 3 Days

This bid would seem to be requesting a line of nothing but 3-day pairings, and that is true. But it is also requesting to have as many 3-day pairings as possible, resulting in some interesting side effects.

Using the Bid Analyzer with this bid would show all 3-day pairings with a score of 100 points. So it would seem that all 3-day pairings are equally desirable for your line. However that is <u>not</u> the case.

There have been cases where a pilot used this bid and received a line with only 3-day pairings. But instead of getting a typical line of just five 3-day pairings he got 7 of them! Also, most of the pairings were low credit pairings! They were 3 days long but had only 2 duty periods, so they had only 10:30 of credit each.

Why did PBS do this? Remember that PBS will award you the line that has the highest score. PBS got a higher score by awarding 2 extra pairings at 100 points each. A normal line with 5 pairings would have scored only 500 points, but 7 pairings are worth 700 points. PBS could fit more pairings on the line by using low credit pairings! This way it would not exceed the line limit.

This pilot would have done better to bid this way:

100 points Avoid Pairing Greater than 3 Days 100 points Avoid Pairing Less than 3 Days

Now all 3-day pairings would score zero points and all other pairings would be penalized 100 points (-100 points). With this bid PBS would try to avoid using anything but 3-day pairings. But more importantly, it would not try to cram extra 3-day pairings on the line since there is no benefit for doing so. A line of 5 3-day pairings scores just the same as a line of 7 3-day pairings: they both score zero.

General Rules for Desire vs. Avoid

Most bid options give you the choice of designating the preference either as a Desire or an Avoid. Generally it is good to follow these rules:

Use Desire when requesting time-off from work. Desire says "I want a lot of this" and you usually want a lot of time off, as much as you can get.

Use Avoid when it applies to work and work characteristics. Often it's not that you want a lot of certain types of work features but rather that you are really trying to avoid the unpleasant types of work. Therefore, state your work preferences to avoid the undesirable aspects whenever possible, and PBS will try to avoid them.

In summary: "AVOID" work and "DESIRE" time off!

5.3 Bid Weighting

All defined bid options tell the Solver what is important, what you want to have and what you don't want to have in your schedule. However, depending on operational constraints and seniority, it may not be possible to have all your requests granted. The weights you assign to each bid option tell the Solver which bid options are more important and are used to rank the bid options for the Solver.

5.3.1 Weighting Logic

Pilots can use either *automatic* or *manual* weighting in a given Bid Session. The two types of weighting cannot be mixed. In manual weighting, the pilot assigns the bid option a value between 1 and 1000 points. If the pilot tries to put in 0 (zero) points for an option, the Crew Interface changes the value to 1 point. Pilots must understand how a bid option scores (by occurrence, by the hour, by the minute, etc.) in order to ensure the option is weighted correctly with respect to the pilot's other criteria. Using manual weighting may require more work, but it

also provides much more ability than automatic weighting to specify the relative importance of different bid options.

In automatic weighting, the pilot assigns the bid option a value of High, Medium or Low. The pilot can assign the same weight to multiple bid options (e.g., he can have four options marked High, two options marked Medium, and five options marked Low). Internally, the Solver calculates a point value for each bid option when using automatic weighting. No combination of bid options marked Medium will be worth more than one bid option marked High and no combination of bid options marked Low will be worth more than one bid option marked Medium. (It is not correct to assume that 2 Mediums equal one High or 2 Lows equal one Medium.) Automatic weighting can be useful if the pilot's needs are simple, but automatic weighting does not allow the pilot to define many "shades of gray" in the bid. If the pilot switches between manual and automatic weighting, the system assigns a default value to the selected bid options. A corresponding warning is issued to the pilot when switching back and forth between manual and automatic modes. The following default values are used:

- From manual to automatic mode: all bid options are assigned Medium
- From automatic to manual mode: all bid options are assigned 50 points

The Solver never compares one pilot's weights with any other pilot. Therefore, the pilot does not need to use 1000 points or High to define all requests to ensure they will be granted. The pilot should assign weights to each bid option as they relate in importance to that pilot's other bid option requests.

5.3.2 Manual Weighting

When using Manual Weighting, pilots add a value to each bid option on a scale from 1 to 1000 points. The bid option's weight is multiplied by the number of times that bid option is satisfied in your schedule. This is the score that bid would receive if awarded. Use extreme **CAUTION** when manual biding, depending on the bid option, some are scored per credit hour, occurrence, or by the month.

5.3.2.1 Differential Weighting

Text View Calendar View Other Options CDO Line	Reserve Line Type
200 pts Reg Desire Sat Off	Select All
100 pts Reg Desire Sun Off	Edit
	Duplicate
	Delete All Sort
<	× >

In the above example, the pilot has defined that he would like to be granted, Sundays and Saturdays off. The pilot is also indicating that if the Solver has to choose between granting a Sunday or a Saturday off, getting a Saturday off is twice as desirable as getting a Sunday off. Because the Solver is trying to maximize the total score for the pilot, it tries to award both Saturdays and Sundays off.

5.3.2.2 Equal Weighting

Text View Calendar View Other Options CDO Line	Reserve Line Type
 100 pts Reg Desire Pairing M3015 On Jan 1 100 pts Reg Desire Pairing M3021 On Jan 3 	Select All Unselect All Edit Duplicate Delete Delete All Sort

In the example above the pilot is requesting different pairings on different days. The chosen weight is 100 points. These requests do not conflict with one another and are equally desirable.

Care should be taken when assigning the same weight to different requests because the total weight of a pairing or day off may be completely changed because of another request.

Example:

Text View Calendar View Other Options CDO Line	Reserve Line Type
800 pts Reg Avoid Work On Jan 7 800 pts Reg Desire Pairing Length In Days greater than 2	Select All Unselect All Edit
	Duplicate Delete Delete All Sort
	>

Above, the pilot has entered two bids with the same weight. However, since one is an "AVOID" bid, and one is a "DESIRE" bid, they could possibly cancel each other out. If the Solver may evaluate the available pairings and determine that adding a trip which starts on Jan 7 is just fine, especially if it is a 3- or 4-day trip. Here is why:

- If the Solver awards a pairing on Jan 7, the score of -800 would apply
- If the Solver awards a pairing that is either 3 or 4 days in length, the score of +800 would apply.
 - Since -800 would cancel +800 (net points = 0) the Solver could easily justify awarding a trip on Jan 7.

To avoid this scenario, differential weighting needs to be utilized.

5.3.2.3 Manual Weighting Pitfalls

Consider the following example:

Text View Calendar View Other Options CDO Line	Reserve Line Type
1000 pts Reg Desire Weekends Off 100 pts Reg Desire Credit	Select All Unselect All Edit Duplicate
<	Delete All Sort

At first glance it appears that this pilot has set up his bid so that Weekends Off is more important than Credit. However, it is very possible that even with top

seniority the Solver could award a line that had 90 hours of "Credit" and no "Weekends off".

How could this happen? The Solver was able to award more points by granting more hours of credit that it could by awarding all weekends off. The line would score would be as follows:

- Bid Option #1: 1000 points times 0 weekends off = 0 points
- Bid Option #2: 100 points times 90 occurrences = 9000 points <u>Total score would be 9000 points</u>.

The potential score of all weekends off is only 4000 points (4 weekends in a month times 1000 points). The solver only had to award *41 hours* of credit to outweigh all weekends. (41 hours credit times 100 points equals 4100 points).

The lesson here is that Manual Weighting has to be thought of in terms of "potential" score, meaning that each bid you make should be thought through to determine how awarding the bid will affect the award of other bids.

5.3.2.4 Total Score

The Solver will strive to maximize the satisfaction of all of a pilot's bid preferences while still satisfying global system constraints and maintaining line construction rules. In order to do this, it has to evaluate each pairing that is unassigned at the pilot's level of seniority in the line award process. Every pairing is scored according to the pilot's bid, and the Solver determines which combination of the pairings would create the highest "Total Score" for the pilot. The Solver then evaluates the legality of the line and eliminates pairings, duty, or days off sequences that would violate any system constraints – all while trying to attain the highest score possible.

Overall, the process drives the solver to attain the highest score possible for the pilot, thus maximizing the satisfaction of his bid. Let's take an example:

Text View	Calendar View	Other Options	CDO Line	Reserve Line Type				
1000 pts Reg	g Desire Weekends Off			Select All				
500 pts Reg	500 pts Reg Desire Pairing M3015 On Jan 1							
300 pts Reg	g Desire Period Jan 9 to) Jan 12 Off		Edit Duplicate				

This pilot's bid would have a potential Total Score of 4800 points, the highest score possible for this bid. When the Solver builds a line for this pilot, it will aim to achieve a score of 4800. If any constraint causes one the pilot's bid preferences to not be honored, the solver still attempts to get the score as close as possible to 4800.

Keep in mind that the highest score possible could be zero. Consider the following example:



In this bid, the highest Total Score possible is 0 (zero). Because all of the bids are to AVOID a certain schedule characteristic, the Solver would be penalized with negative points if any of the conditions listed in the bid were met. This is an acceptable way to bid, so long that the pilot does not have any preference for other pairing or days off schedule characteristics.

5.3.2.4 Utilizing the Bid Matrix Method

The classic PBS dilemma is "how much weight do I assign to my preferences?" Bidders need to remember that Altitude® PBS is NOT a sequential "first choice, second choice, third choice system." The sole purpose of the Solver is to award you as many points as possible. If the Solver can award you more points by giving you more points from a bid preference that has little weight, rather than giving you fewer points from fewer occurrences of a more heavily weighted preference, it will.

A good way to determine what weights to give a bid option is the "Bid Matrix" method. This method forces you to think about how each option scores, and how many times something can occur.

Simply set up your bid preferences in a matrix or table that lists the bid, the weight you will assign to the bid, the potential occurrence of the satisfaction of the bid, and the resulting potential score. Remember that the weight of the bid multiplied by the potential occurrences gives you the potential score.

The Bid	Weight	X	Potential Occurrences	=	Potential Score
Desire 12/25 off	1000pts	х	1	Π	1000
Desire weekends off	900 pts	х	4	П	3600
Desire Credit	100pts	Х	85	=	8500

Here is an example:

If a pilot only looked at the weight of the bids, it appears obvious that the first priority is 12/25 off, second priority would be Weekends off and third Desire Credit. If the Solver cannot grant all three of the bid options, the Solver may be able to award a line score of 8500 by awarding 85 hours of credit *without* awarding any other preferences.

A more appropriate bid may be:

The Bid	Weight	x	Potential Occurrences	=	Potential Score
Desire 12/25 off	1000pts	х	1	=	1000
Desire weekends off	900 pts	х	4	=	3600
Desire Credit	10pts	х	85	=	850

Notice that the change in the bid is subtle; simply by "dropping a zero" off the bid for Credit, the potential score no longer has the ability to outweigh the satisfaction of either of the other two bids. Even if only one weekend is awarded off (900 pts) it is not challenged by the potential score of the Credit bid.

5.3.2.5 Other Manual Weighting Methods

If you don't wish to use the Bid Matrix method, you can always use the "1000, 800, 600, 400, 200" method. Simply assign 1000 to your highest preference, 800 to your second preference, and so on. Be aware that this may not always avoid unexpected consequences if you don't think about how your bid options score (by the trip, the leg, the duty period, the hour, etc).

Do not weight your bids with tiny variances of score between them (such as 1000, 999, 998, 997, 996, etc). While it is not technically wrong to bid this way, any misjudgment on your part about how many times a bid can be awarded can outscore a higher preference. Allowing more separation between weights allows room for error. The weight you assign is only to establish a relative importance between each bid option. If the weights are close, there is a smaller difference in the relative importance.

5.3.3 Automatic Weighting

Automatic Weighting offers the ability to use three different levels of weights when prioritizing requests (High, Medium and Low). All requests of the same level (e.g., High) are all considered to be equally desirable.

Text View	Calendar View	Other Options	CDO Line	Reserve Line Type
High Reg	Avoid Turn In Any gre	ater than 2h00		Select All
Low V Reg	Avoid Check-In Time Avoid Deadhead Flight	between 00:01 and 13: ts	00	Edit
				Duplicate Delete
				Delete All
<			3	Sort

Unlike manual bidding, where crewmembers must assign the appropriate weight to all the preferences, automatic bidding leaves this task to the Solver. Crewmembers define their requests in terms of High (for highly desirable or undesirable), Medium (for moderately desirable or undesirable), and Low (for least desirable or undesirable). The solver first analyzes the preferences, and automatically translates the levels into weights. This is done so that:

- No combination of Low preferences can be worth more than any single occurrence of one Medium Preference.
- No combination of Low and Medium preferences can be worth more than any single occurrence of on High Preference.

It is possible to use the same weight for preferences that score differently, the solver uses an equivalency factor to balance the weight of these preferences. All weights are factored to a one-day equivalency.

Users must be aware that in the event the Solver can't assign all the requests within one level (e.g. High level), it will chose which request to assign according to the equivalency factor the requests are worth. In the event that multiple requests are worth the same equivalency factor, the Solver will choose randomly.

Example #1

High Desire Weekends Off High Desire Date mm-dd Off

If, for some reason, it is not possible for the Solver to assign the weekends off **and** the specific date off, the Solver will attempt to assign the weekend off since it is worth 2 "days" instead of the specific date off, which is worth 1 Day.

Example #2

High Desire Weekends Off High Desire 12/24 Off High Desire 12/25 Off

If the solver can't award all three requests, the solver would first try to award weekends off since each weekend is worth 2 days. If the solver can't assign both 24th and 25th off, it will choose randomly between the two since they are both worth 1 day and have the same weight assigned to them.

5.4 The Bid Analyzer

You may want to see how things are going part way through constructing your bid, or at any other time during the current bid period. The Bid Analyzer is a tool designed for exactly this – to help the pilot evaluate his bid. Clicking the "Analyze" command button at the bottom of the Bid Entry Pad opens the Bid Analyzer in a separate browser window.

The Bid Analyzer applies the pilot's bid options to all the pairings in the pilot's category. It then displays all the pairings in descending order of the score each pairing would receive. Since the Bid Analyzer opens in a separate browser window, it is possible to go back to the List of Selected Bids and edit the bid options. If you do this, the Bid Analyzer will not automatically update with the new bid options or weightings. The Bid Analyzer only 'knows' about the bid options and weightings that were in the List of Selected Bids at the time the Analyze button was clicked. You must click the Analyze button again in order to see any changes you made to your bid options.

The Bid Analyzer can only be used after the Monthly Bid has been officially opened because prior to that the pairing information for the Bid Month has not been made available in PBS.

5.4.1 Using the Bid Analyzer

The Bid Analyzer shows the score each pairing would get based on the pilot's bid options. The Bid Analyzer sorts the pairings in desirability order (highest score first). The Bid Analyzer is a critical tool for evaluating whether or not a pilot's selected bid options are scoring pairings the way the pilot intended. *Note:* The Bid Analyzer will display all pairings available to the pilot as if the crewmember was <u>alone</u> in his position. It cannot determine if the desired pairings will actually be awarded to that pilot because they may not be available at the pilot's seniority level.

You might use the Bid Analyzer with only one bid option to search for pairings that contain that option (i.e. layovers in a certain city). When you complete your bid, you might use it to evaluate your requests and weights to distinguish if they are correct. If you do change your bids, refresh the Bid Analyzer to show the effect of the new bids.

Please keep in mind the following Bid Analyzer limitations:

- **It assumes that you are seniority number one in your category.** (In other words, all pairings are available for evaluation).
- It does not consider bid options that relate to an entire line. (Non-Participating Bid Options) A Non-Participating Bid Option is a one that

cannot score based on a specific or individual Pairing. e.g. Desire/Avoid Work Periods

- Certain FAR and contract rules (for example, 29 hours in 7 days) are ignored, as they cannot be evaluated until the line is awarded.

Filter Rese	t							^			Domici	le		Ec	uipment
Non Participating Bids:							≡	MSP SF						SF3	
Regular Avoid Consecutive Working Days greater than 3 Regular Desire Days Off										EFF EQP	01/05/09 FLT#	THRU DPT	01/29/09 ARV	XC DPTR	01/29 LST (G
Click on a tas	k name to v	iew analysis	s details fo	r that ta	sk:					•••••					
Task name	Start date	End date	Duration	<u>Credit</u>	Aircraft type	Conflict	Score			SFC	3010	MSP	ATW	0720	(1320)
<u>M3107</u>	Mon Jan 05	Wed Jan 07	3	16h52	SF3		0.0			SEC	2792	MSP	CMX	1130	(1730)
<u>M3107</u>	Tue Jan 06	Thu Jan 08	3	16h52	SF3		0.0				2.52				(2.00
<u>M3107</u>	Wed Jan 07	Fri Jan 09	3	16h52	SF3		0.0			SFC	2795	CMX	MSP	1422	(1922)
M3107	Mon Jan 12	Wed Jan 14	3	16652	5F3	-	0.0			SFC	2761	MSP	STC	1530	(2130
M3107	Wed lan 14	Fri Jan 16	3	16h52	SF3		0.0	6	e 1						
VI3107	Mon Jan 19	Wed lan 21	3	16h52	SF3	-	0.0	U	•						
M3107	Tue lan 20	Thu lan 22	3	16h52	SE3	-	0.0		Occur	rence	/score de	etail			
M3107	Wed Jan 21	Fri Jan 23	3	16h52	SE3	-	0.0								
43107	Mon Jan 26	Wed Jan 28	3	16h52	SF3	1	0.0								
43107	Tue Jan 27	Thu Jan 29	3	16h52	SF3	i	0.0		Score Occurrence Bid						
43107	Wed Jan 28	Fri Jan 30	3	16h52	SF3		0.0		30010	-	0	ccurre	ance bio	- ·	
0000	Mon Jan 05	Wed Jan 07	3	17h37	SF3		0.0		0.0		0.	0	1000	Desi	ie kondo Off
0000	Tue Jan 06	Thu Jan 08	3	17h37	SF3		0.0		~ ~			~	pus	wee	kenus On
0000	Wed Jan 07	Fri Jan 09	3	17h37	SF3		0.0		-0.0		0.	0	1000	Clack	
0000	Mon Jan 12	Wed Jan 14	3	17h37	SF3		0.0		0.0		0	•	500	Augic	l Doiring
0000	Tue Jan 13	Thu Jan 15	3	17h37	SF3		0.0		-0.0		0.	0	500	Long	th In
0000	Wed Jan 14	Fri Jan 16	3	17h37	SF3		0.0						pts	Dave	areater
0000	Mon Jan 19	Wed Jan 21	3	17h37	SF3	<u> </u>	0.0							than	3
0000	Tue Jan 20	Thu Jan 22	3	17h37	SF3		0.0		-0.0		0	0	100	Δνοία	- I Pairing
0000	Wed Jan 21	Fri Jan 23	3	17h37	SF3		0.0		5.0		0.	-	pts	Lena	th less
0000	Mon Jan 26	Wed Jan 28	3	17h37	SF3		0.0							than	16h00
0000	Tue Jan 27	Thu Jan 29	3	17h37	SF3		0.0	~	Total	score	- 0.0				
Analyzer L 1. The an 2. The an 3. The an	imitations alyzer assum alyzer looks alyzer ignore	ies that you at each pairi s some bid (are alone i ng one at t	n your ca ime in a	ategory, with n vacuum. It doe isted in red at t	o coverage s not cons	constrair ider senio left.	nts. ority	, the lir	ne as a	whole or le	gality.			

The Bid Analyzer window is divided into four sections:

- the non-participating bid options and the list of pairings are on the left
- the selected pairing's description on the top right(when selected)
- the scoring details on the bottom right(when selected)
- the analyzer limitations in the bottom section.

Sorting the pairings

Inside the top left window you can click any of the column headings to sort your data. You can click on any column heading to sort the pairings by that characteristic. Use the Bid Analyzer to get you to a point where you are able to define what your first priority really is.

Note: The Bid Analyzer does not give a preview of the line that will be awarded. It simply evaluates individual pairings in relation to your bid.

Filter

Inside the Bid Analyzer you can filter pairings. To use the filter option, click on the "Filter" button located in the top left of the Bid Analyzer window. To restrict the pairings analyzed and to ease the bidding process, pairings can be filtered by the following criteria:

✓	Pairing Name	eq 🔽	M3107 🔽
~	Start Day of Week	eq 🔽	Monday 💌
	Start Date	eq 🗸	Thu 1, Jan 2009 🛛 🗸
	End Date	eq 🗸	Thu 1, Jan 2009 🛛 🗸
	Report Time	eq 🗸	0 🗸 : 00 🗸
	Release Time	eq 🗸	0 🗸 : 00 🗸
	Duration	eq 🗸	1 🔽 days
	Credit Time	eq 🗸	0 🗸 h 00 🗸
	Layover At	eq 🗸	ABR 🗸
	Flight Number	eq 🗸	NW 2335 🗸
	ſ	Apply	

Simply define the filtering criteria, click "Apply" at the bottom, and the Bid Analyzer window will reload with the filtered out pairings listed.

6 Bid Options

6.1 General

This section provides an overview of all bidding options available to the pilot through the PBS Crew Interface. All examples use default values. For specific bidding strategies, see Section 7.

In an effort to simplify the bid selection process, AD OPT has divided the list of bid options into eight distinct bid option classes:

- Time Off Requests (applies to regular and reserve lines)
- Pairing Requests (applies to regular lines only)
- Pairing Layover Requests (applies to regular lines only)
- Work Requests (applies to regular and reserve lines)
- Quality of Life Requests (applies to regular lines only)
- Productivity Requests (applies to regular and reserve lines
- Reserve Requests (applies to reserve lines only)
- Short Term Training Requests

When a bid option is selected from a bid option class, it is automatically added to a pilot's bid list.

6.1.1 Bid Scope

The bid scope refers to the type of line to which the bid applies. There are two types of bid scopes that are available – Regular and Reserve. The bid scope is selected with the Bid Scope Selector in the Crew Interface.

Be sure to be mindful of bid scope when constructing your bid. If you know you are not sufficiently senior to hold a regular line, still enter your bid with requests in regular *and* reserve scope.
6.1.2 Symbology Usage

The following is the symbology used within this manual. When a bid can be selected using either Desire or Avoid, the description includes words between parentheses to mark the Avoid distinction. The bid option's syntax is marked in bold, and bid parameters are marked in italics. Unless otherwise specified, all times are local at the base station (domicile time). All dates, times, numbers, etc., in the Crew Interface must be selected from a drop-down list. This helps avoid entry errors by ensuring the information is in a standard format.

[Bracketed text] in the bid option syntax examples indicate a variable that needs to be defined by the pilot. Explanations for the variable types are listed below:

aaa	An equipment type (e.g., SF3)
apt	Three-letter airport identifier
hh:mm	Time with hours and minutes using a 24-hour clock (e.g., 13:45). Times used for bid options in the interface are always selected from two lists. Select the hours from one list and the minutes from the other list.
hh:mm1 hh:mm2	Two times (e.g., 13:45 15:30). Each time is selected in the manner described above.
n	One-digit number
nn	Two-digit number
nnnn	Four-digit flight number or pairing number
nnnn	Four-digit flight number or pairing number
ddd	Three letter abbreviated day

6.2 Date and Time Off Requests

6.2.1 Consecutive Days Off

Score: 100 pts

© 50010. jao	pto pto
Remove	Consecutive Days Off Avoid Consecutive Days Off less than 2 -
	Description Avoid consecutive day off periods of less than the specific number of days.
	Scoring Negative score applies for each day less than the specified number within a sequence of days off.
	Notes 1. Can only be used once per bid session.
	Day(s) off at the end of the previous bid period period will be combined with day(s) off at the beginning of the new bid period, and will be scored against the specified number selected.
Scope: Reg	Example 100 pts Avoid Consecutive Days Off less than 3

Syntax: AVOID Consecutive Days Off less than [nn]

- **Scoring:** This bid option scores NEGATIVELY for each time the Solver awards a sequence of days off less than the specified limit.
- **Example:** 100 pts AVOID Consecutive Days Off less than 3

If the pilot is awarded a line with two stretches of 2 days off and two stretches of 4 days off, the score would be -200

Notes/Tips: This bid option can only be used <u>once</u> per bid session. Remember that this is a "whole line" bid option, which will be only scored in the context of how the entire line is constructed. As such, it will be listed as a "Non-Participating" bid in the Bid Analyzer.

6.2.2 Day of Week Off



Syntax: DESIRE [ddd] Off

- **Scoring:** Points are awarded for each time the requested day of the week is granted off on the awarded line. However, if the Solver awards a pairing that carries-out to the next bid month, including into one of the requested days of the week off, the Solver is penalized with ¹/₂ the point value specified.
- Example: 100 pts DESIRE Mon Off

If the pilot is awarded a line that has 2 Mondays off, the score is +100. Should the pilot be awarded a line that contains a carry-out trip that works into a Monday of the following bid month, 50 points would be penalized (subtracted) from the score.

Notes/Tips: This bid option can be used similarly to "AVOID Work on Day of Week." The difference lies in the scoring methodology, but the affect on the Solver is the same.

6.2.3 Days Off

Score: 20	0 pts
Remove	Days Off Desire Days Off
	Description Desire a schedule containing the most days off.
	Scoring Positive score applies for each day off awarded.
Scope: Reg	Example 200 pts Desire Days Off

Syntax: DESIRE Days Off

Scoring: The score is applied positively for each day off awarded by the Solver.

Example: 200 pts DESIRE Days Off

If the pilot is awarded a line with 14 days off, the score would be +2800.

Notes/Tips: This bid option is a good option to keep as a part of your Standing Bid, if you desire. Again, this bid is a "whole line" option, which cannot be scored unless the entire line is looked at in context. It also will be a "Non-Participating" bid in the Bid Analyzer.

6.2.4 Partial Date Off



Syntax: AVOID Work on [mmm dd] [before/after/between] [hh]:[mm] [hh:mm]

Scoring: The Solver is penalized (negatively scored) every time a pairing's duty period touches the specified timeframe.

Example: 600 pts AVOID Work on Oct 15 after 13:00

If the pilot is awarded a line that has a pairing containing a duty period that operates between 13:00 and 23:59 on April 15th, the Solver is penalized -600 points.

Notes/Tips: This bid option can be utilized to prevent show times at the beginning of your trip, or duty-off times at the end of your trip, from occurring at certain times of the day. You may also use this bid option as a back-up to the "Specific Date Off" to try and get at least part of a certain date off if not the entire date. This bid can be used as a conditional bid.

6.2.5 Partial Day of Week Off



Syntax: AVOID Work on [ddd] [before/after/between] [hh]:[mm] [hh]:[mm]

- **Scoring:** The Solver is penalized (negatively scored) every time a pairing's duty period touches the specified timeframe.
- **Example:** 600 pts AVOID Work on Mon after 13:00

If the pilot is awarded a line that has a pairing containing a duty period that operates between 13:00 and 23:59 on a Monday, the Solver is penalized -600 points.

Notes/Tips: This bid option can be utilized to prevent show times at the beginning of your trip, or duty-off times at the end of your trip, from occurring at certain times of the day. You may also use this bid option as a back-up to the "Specific Day Off" to try and get at least part of a certain date off if not the entire date. This bid can be used as a conditional bid.

6.2.6 Period of Dates Off



Syntax: DESIRE Period [mmmdd] to [mmmdd] Off

- **Scoring:** The Solver will award points only if the entire period specified in the date range is awarded off.
- **Example:** 200 pts DESIRE Period Oct 1 to Oct 5 Off

If the pilot is awarded a line that has no duty scheduled between October 1 and October 5, 200 points will be awarded to his score.

Notes/Tips: This bid option can be entered for any period of dates, even dates outside the current bid period. However, they will only be evaluated as a "participating bid" if the dates entered are part of the current bid period for the bid session. Also, if a carry-in pairing or activity affects the period requested in the bid, the bid is automatically adjusted to accommodate the carry-in. This bid can be used as a conditional bid.

6.2.7 Period of Days Off



Syntax: DESIRE Period [ddd] to [ddd] Off

- **Scoring:** The Solver will award points only if the entire period specified in the range of weekdays is awarded off. Can score multiple times in a month.
- Example: 200 pts DESIRE Period Mon to Thu Off

If the pilot is awarded a line that has no duty scheduled between any Monday-Friday period during the bid month, 200 points is awarded.

Notes/Tips: This bid option can be entered for any period of days in the week Also, if a carry-in pairing or activity affects the period requested in the bid, the bid is automatically adjusted to accommodate the carryin. This bid can be used as a conditional bid.

6.2.8 Period of Partial Dates Off



Syntax: AVOID Work between [mmm dd] [hh:mm] and [mmm dd] [hh:mm]

Scoring: The Solver will be penalized if any duty is assigned during period specified in the date/time range.

Example: 100 pts AVOID Work between Oct 9 18:00 and Oct 12 08:00

If the pilot is awarded a line that has any duty scheduled between Apr 9 18:00 and Apr 12 08:00, then 100 points will penalized against the total score (negative score).

Notes/Tips: This bid can be used as a conditional bid.

6.2.9 Period of Partial Days Off



Syntax: AVOID Work between [ddd] [hh:mm] and [ddd] [hh:mm]

- **Scoring:** The Solver will be penalized if any duty is assigned during period specified in the day of week/time range.
- **Example:** 100 pts AVOID Work between Mon 18:00 and Wed 08:00

If the pilot is awarded a line that has any duty scheduled between Mondays at 18:00 and Wednesdays at 08:00, then 100 points will penalized against the total score (negative score).

Notes/Tips: This bid is very helpful for accommodating weekly recurring events. This bid can be used as a conditional bid.

6.2.10 Specific Date Off

Score: 900 pts			
Remove	Specific Date Off Desire Oct 1 → Off		
	Description Desire to be off on a specific date.		
	Scoring Positive score applies for each specified date awarded off in the current bid period.		
	Notes 1. Dates off requests are only applicable to dates within the bid period.		
	2. When utilizing the Bid Analyzer, this bid option scores as "avoid work".		
Scope: Reg	Example 900 pts Desire Jan 20 Off		

Syntax: DESIRE [mmm dd] Off

- **Scoring:** The Solver will award points if the pilot is awarded a line with the specified date free of duty.
- Example: 900 pts Desire Oct 1 Off

If the pilot is awarded a line with April 1 off, the Solver will score positively 900 pts.

Notes/Tips: You can add this bid for any date of the year, however the bid will only score as a "participating bid" if the date is in the current bid period.

6.2.11 String of Dates Off

Score: 100 pts			
Remove	String Of Dates Off Desire String Oct 13 • to Oct 17 • Off		
	Description Desire a string of dates off.		
	Scoring 1. Positive score applies for each awarded date off in an unbroken string beginning with the first specified date. If the first date in the string is not considered duty free, the entire option is then ignored and no points are added.		
	2. The first date specified is the most important date of the string; it has to be awarded off for the string to score.		
	Notes 1. The first date can be chronologically later than the last if it is the most important. (See 2 nd example below).		
	Requests are only applicable to days within the bid period. A requested string conflicting with a planned duty assignment (e.g. carry-in pairing) is automatically adjusted to start at the end of the duty period.		
	3. When utilizing the Bid Analyzer, this bid option scores as "avoid work".		
	Examples 1. 200 pts Desire String Sep 9 to Sep 12 Off		
Scope: Reg	2. 250 pts Desire String Sep 21 to Sep 17 Off		

Syntax: DESIRE String [mmm dd] to [mmm dd] Off

- **Scoring:** The Solver will award the specified point value each time a date in the string of dates is awarded. The highest potential score of this bid is equal to the number of dates in the string multiplied by the weight of the bid.
- **Example:** 100 pts DESIRE String Oct 13 to Oct 17 Off

If the Solver awards a line that contains October 13-17 free of duty, the score would be 400 points. If the Solver awards a line that contains only October 13 off, the score would be 100 points.

Notes/Tips: The dates in the string are prioritized by the solver from the first date listed to the last date listed. For example, if Oct 13 to Oct 17 is entered, the Solver begins awarding/scoring with Oct 13. The date string can be reversed (i.e. Oct 17 to Oct 13) so that the Solver "works backwards" in the date priority. This aspect of the string bid is useful for bidding around vacation blocks.

If you had a vacation block that ran from Oct 13 to 19, you could bid the following on either side of the block to maximize days off before and after the vacation:

100 pts DESIRE String Oct 12 to Oct 1 100 pts DESIRE String Oct 20 to Oct 31

6.2.12 String of Days Off



Syntax: DESIRE String [ddd] to [ddd] Off

- **Scoring:** The Solver will award the specified point value each time a day in the string of weekdays is awarded. The highest potential score of this bid is equal to the number of days in the string multiplied by the weight of the bid.
- **Example:** 100 pts DESIRE String Mon to Wed Off

If the Solver awards a line that contains Mon, Tue, Wed in a week free of duty, the score would be 300 points. If the Solver awards a line that contains only Mon off, the score would be 100 points.

Notes/Tips: The days in the string are prioritized by the solver from the first day listed to the last day listed. For example, if Mon to Wed is entered, the Solver begins awarding/scoring with Monday. The day string can be reversed (i.e. Wed to Mon) so that the Solver "works backwards" in the priority. This aspect of the string bid is useful for maximizing days off on either side of a recurring weekly event.

6.2.13 Weekends Off



Syntax: DESIRE Weekends Off

- **Scoring:** The Solver will award the specified point value each time a full weekend (0001 Saturday to 2400 Sunday) is free from duty.
- **Example:** 500 pts DESIRE Weekends Off

Logically speaking, this bid scores the same as an "AVOID Work on Weekends" bid. However, the Solver is utilizing the weight of this score to increase scoring potential instead of using it as a penalty if a weekend isn't awarded off. If four full weekends exist in a bid month and all are awarded off, the score for this example would be 2000 points.

Notes/Tips: When a pairing is awarded in the current bid period which carries out into the following bid period, and that pairing ends up working on a weekend day in the following bid month, the Solver will be penalized with ½ of the bid weight. When the first day of the bid period is a Sunday, and/or the last day of the bid period is a Saturday, these dates will count as full weekends.

6.3 Pairing Requests

6.3.1 Check-in On Date(s)

Score: 10	0 pts		
Remove	Check-In On Date(s) Avoid ▼ Check-In Time on Oct 12 ▼ [to Oct 15 ▼] between 9 ▼ : 00 ▼ and 11 ▼ : 30 ▼		
	Description Desire (avoid) report time at the start of the pairing during a specific time range on one (or many) specific date(s).		
	Scoring Positive (negative) score applies for each pairing on the specified date(s) meeting the specified check-in time criteria.		
	Notes 1. The time range cannot cross midnight.		
	2. When using a date range, occurrences reporting on different dates are scored equally.		
	3. The second time period must be later than the first.		
Scope: Reg	Example 100 pts Avoid Check-In Time on Nov 24 to Nov 26 between 05:00 and 09:30		

Syntax: [DESIRE/AVOID] Check-In Time on [mmm dd] to [mmm dd] between [hh:mm] and [hh:mm]

- **Scoring:** The Solver will either award or penalize points for each time a pairing has a check-in (report time at the commencement of the pairing) which falls within the dates and times specified.
- **Example:** 100 pts AVOID Check-In Time on Oct 12 to Oct 15 between 09:00 and 11:30

If a pairing were awarded that had a check-in time of 10:00 on Oct 13, the Solver would be penalized 100 pts.

Notes/Tips: The range of time specified in this bid cannot cross 2400 (midnight). Likewise, the time variables must be specified in chronological order. This bid can score recurrently.

6.3.2 Check-in On Day(s)



Syntax: [DESIRE/AVOID] Check-In Time on [ddd] to [ddd] between [hh:mm] and [hh:mm]

- **Scoring:** The Solver will either award or penalize points for each time a pairing has a check-in (report time at the commencement of the pairing) which falls within the days and times specified.
- **Example:** 100 pts AVOID Check-In Time on Fri to Sat between 09:00 and 11:30

If a pairing were awarded that had a check-in time of 10:00 on a Saturday, the Solver would be penalized 100 pts.

Notes/Tips: The range of time specified in this bid cannot cross 2400 (midnight). Likewise, the time variables must be specified in chronological order. This bid can score recurrently.

6.3.3 Check-In Time

Score: 100 pts			
Remove	Check-In Time Avoid ▼ Check-In Time between 9 ▼ : 00 ▼ and 11 ▼ : 30 ▼		
	Description Desire (avoid) report time at the start of each pairing, during the specific time range.		
	Scoring Positive (negative) score applies for each pairing within the specified report time range.		
Scope: Reg	Example 100 pts Avoid Check-In Time between 00:01 and 08:30		

Syntax: [DESIRE/AVOID] Check-In Time between [hh:mm] and [hh:mm]

- **Scoring:** The Solver will either award or penalize points for each time a pairing has a check-in (report time at the commencement of the pairing) during the times specified.
- **Example:** 100 pts AVOID Check-In Time between 09:00 and 11:30

If a pairing were awarded that had a check-in time of 10:00 the Solver would be penalized 100 pts.

Notes/Tips: The range of time specified in this bid cannot cross 2400 (midnight). Likewise, the time variables must be specified in chronological order. This bid will be evaluated against every pairing awarded during the month.

6.3.4 Check-Out On Date(s)

Score: 10	pts		
Remove	Check-Out On Date(s) Avoid Check-Out Time on Oct 12 (to Oct 15) between 9 . 00 and 11 . 30		
	Description Desire (avoid) release time at the end of the pairing, during a specific time range on one (or many) specific date(s).		
	Scoring Positive (negative) score applies for each pairing on the specified date(s) meeting the specified check-out time criteria.		
	Notes 1. The time range cannot cross midnight.		
	2. When using a date range, occurrences releasing on different dates are scored equally.		
	3. The second time period must be later than the first.		
Scope: Reg	Example 100 pts Avoid Check-Out Time on Nov 4 to Nov 12 between 19:00 and 23:30		

Syntax: [DESIRE/AVOID] Check-Out Time on [mmm dd] to [mmm dd] between [hh:mm] and [hh:mm]

- **Scoring:** The Solver will either award or penalize points for each time a pairing has a check-out (duty-off time at the end of the pairing) which falls within the dates and times specified.
- **Example:** 100 pts AVOID Check-Out Time on Oct 12 to Oct 15 between 09:00 and 11:30

If a pairing were awarded that had a check-out time of 10:00 on Oct 13, the Solver would be penalized 100 pts.

Notes/Tips: The range of time specified in this bid cannot cross 2400 (midnight). Likewise, the time variables must be specified in chronological order. This bid can score recurrently.

6.3.5 Check-Out on Day(s)



Syntax: [DESIRE/AVOID] Check-Out Time on [ddd] to [ddd] between [hh:mm] and [hh:mm]

- **Scoring:** The Solver will either award or penalize points for each time a pairing has a check-out (duty-off time at the end of the pairing) which falls within the days and times specified.
- **Example:** 100 pts AVOID Check-Out Time on Fri to Sun between 09:00 and 11:30

If a pairing were awarded that had a check-out time of 10:00 on a Saturday, the Solver would be penalized 100 pts.

Notes/Tips: The range of time specified in this bid cannot cross 2400 (midnight). Likewise, the time variables must be specified in chronological order. This bid can score recurrently.

6.3.6 Check-Out Time

Score: 100 pts			
Remove	Check-Out Time Avoid ▼ Check-Out Time between 9 ▼ : 00 ▼ and 11 ▼ : 30 ▼		
	Description Desire (avoid) release time at the end of the pairing during the specific time range.		
	Scoring Positive (negative) score applies for each pairing with a release time between those specified.		
Scope: Reg	Example 100 pts Avoid Check-Out Time between 16:00 and 23:30		

Syntax: [DESIRE/AVOID] Check-Out Time between [hh:mm] and [hh:mm]

- **Scoring:** The Solver will either award or penalize points for each time a pairing has a check-out (duty-off time at the end of the pairing) during the times specified.
- **Example:** 100 pts AVOID Check-Out Time between 09:00 and 11:30

If a pairing were awarded that had a check-out time of 10:00 the Solver would be penalized 100 pts.

Notes/Tips: The range of time specified in this bid cannot cross 2400 (midnight). Likewise, the time variables must be specified in chronological order. This bid will be evaluated against every pairing awarded during the month.

6.3.7 Deadhead Flights

Score: 100 pts			
Remove	Deadhead Flights Avoid ▼ Deadhead Flights		
	Description Desire (avoid) trips containing deadhead flights.		
	Scoring Positive (negative) score applies for every deadhead flight in the assigned pairings.		
Scope: Reg	Example 100 pts Avoid Deadhead Flights		

Syntax: [DESIRE/AVOID] Deadhead Flight

- **Scoring:** The Solver will either award or penalize points for each time a deadhead flight leg is contained in an awarded pairing
- **Example:** 100 pts AVOID Deadhead Flights

If three deadhead legs exist in any single, or combination of pairings on the pilots line, the score would be -300 points (penalty).

Notes/Tips: Remember that this bid can be used as either DESIRE or AVOID. If you bid DESIRE the Solver will MAXIMIZE the number of deadhead flights on your line. Beware!

6.3.8 Duty Period Duration

Score: 100 pts			
Remove	Duty Period Duration Avoid ▼ Duty Period Duration greater than ▼ 10 ▼ : 00 ▼		
	Description Desire (avoid) pairings with duty periods greater than or less than a specific duration.		
	Scoring Positive (negative) score applies for each duty period of the specified duration in the assigned pairings.		
Scope: Reg	Example 100 pts Avoid Duty Period Duration greater than 10:00		

Syntax: [DESIRE/AVOID] Duty Period Duration [less than, greater than] [hh]: [mm]

- **Scoring:** The Solver will either award or penalize points for each time a pairing has a duty period longer or shorter than specified.
- **Example:** 100 pts AVOID Duty Period duration greater than 10 h 00 m

If a line is awarded with six duty periods greater than 10 hours in length, the solver is penalized -600 points.

Notes/Tips: A duty period is typically a "daily" occurrence, with the exception of CDOs. Remember that a pairing may have multiple duty periods. *Therefore* when using this bid as a DESIRE request, the scoring can multiply very quickly. Take a look at this example:

Pairing	Duty Periods	Bid Weight	Pairing Score
	less than 10		
	hrs in duration		
D3001	3	200	600
D3013	1	200	200
D3061	2	200	400
D3045	3	200	600
D3002	1	200	200

"100 pts DESIRE Duty Period duration less than 10h 00m"

In this example, the pilot has 5 pairings awarded on his line, each with at least one duty period less than 10 hours. The total score of this bid then is 2000 points. Any single bid preference with the potential to score less than 2000 points on the pilots bid could be outweighed by this bid, and not awarded as a result.

6.3.9 Equipment Type

Score: 10	pts
Remove	Equipment Type Desire V Equipment Type CM9 V
	Description Desire (avoid) segments of a given equipment type.
	Scoring Positive (negative) score applies for each pairing having at least one non-deadhead leg on the specified aircraft type.
Scope: Reg	Example 20 pts Avoid Equipment Type CRJ

Syntax: [DESIRE/AVOID] Equipment Type [SF3/CRJ/CR9]

- **Scoring:** The Solver will either award or penalize points for each time a pairing has flights operated on the specified aircraft type.
- **Example:** 100 pts AVOID Equipment Type CM9

If the pilot is awarded a pairing that operates on the CM9 (CRJ900), the Solver is penalized 100 points.

Notes/Tips: ***It is not anticipated that this bid will be available for pilots, but could be utilized in the future if and when pilots are able to operated common fleet types (such as the CRJ200/CR900).***

6.3.10 International Pairings

Score: 10	pts
Remove	International Pairings
	Description Desire (avoid) pairings that operate to a station identified as international.
	Scoring Positive (negative) score applies for each pairing containing one or more international stations.
Scope: Reg	Example 150 pts Avoid International Pairings

Syntax: [DESIRE/AVOID] International Pairings

Scoring: The Solver will either award or penalize points for each pairing which contains a non-US station.

Example: 100 pts AVOID International Pairings

If the following pairing is awarded:

D3021 ONLY ON SAT BSE REPT: 1426L OPERATES- MAY 02 ONLY 3159DTW-TOL15261614192620144846482797TOL-DTW170217492102214947481303058DTW-YXU1919202223190022103103 SA SA SA (NR 900) REPT: 0540L 0940U AIRPORT INN//SUITES SU 3063 YXU-DTW 0625 0732 1025 1132 107 59 120 3199 DTW-TOL 0852 0939 1252 1339 47 SU 46 46
 3153
 TOL-DTW
 1025
 1112
 1425
 1512
 47
 48
 218

 3168
 DTW-YKF
 1330
 1444
 1730
 1844
 114
 113
 25

 3166
 YKF-DTW
 1509
 1623
 1909
 2023
 114
 115
 SU SU SU

Then the Solver would be penalized (negative score) -100 points. Even though there are two "turns" through international stations, the pairing is scored once.

Notes/Tips: International stations only include Canadian cities at this time. Once international stations in countries other than Canada are added to Mesaba's destination list, further development of a "region" or "country" based bid preference will occur.

If you need to avoid Canada for any reason, this is the bid to utilize.

6.3.11 Leg Duration

Score: 10	pts
Remove	Leg Duration Avoid ▼ Leg Duration less than ▼ 1 ▼ : 00 ▼
	Description Desire (avoid) flight legs whose duration is greater than or less than specific length (hours and minutes).
	Scoring Positive (negative) score applies for each leg of the specified length in the assigned pairings.
Scope: Reg	Example 100 pts Avoid Leg Duration greater than 2:00

Syntax: [DESIRE/AVOID] Leg Duration [less than/greater than][hh mm]

Scoring: The Solver will either award or penalize points for each time a pairing contains legs that are more or less than the specified duration.

Example: 100 pts AVOID Leg Duration less than 1h 00m

If the following pairing is awarded:

D3021B	ONLY ON	SUN	BSE REPT: 0752L OPERATES- M	AY 03 ONLY
SU	3199	DTW-TOL	0852 0939 1252 1339 47 46 46	
SU	3153	TOL-DTW	1025 1112 1425 1512 47 48 218	
SU	3168	DTW-YKF	1330 1444 1730 1844 114 113 25	
SU	3166	YKF-DTW	1509 1623 1909 2023 114 115	

The solver would be penalized -200 points. Two of the four legs on this pairing have durations less than 1h 00m.

Notes/Tips: This is a good bid to investigate with the Bid Analyzer filter functions. Make sure to be mindful of the weights used with this bid, as many legs that match your criteria could multiply the score quickly.

6.3.12 Legs Per Duty Period

Score: 100 pts					
Remove	Legs Per Duty Period greater than ▼ 4 ▼				
	Description Desire (avoid) duty periods containing the specific number of legs (including deadhead flights).				
	Scoring 1. Positive (negative) score applies for each duty period with the number of legs greater than or less than the specified number.				
	2. If greater than is used, the bid scores on the number of legs in excess of specified number.				
	3. If less than is used, the bid scores on the number of legs less than the specified number.				
Scope: Reg	Example 100 pts Avoid Legs per Duty Period greater than 4				

Syntax: [DESIRE/AVOID] Legs Per Duty Period [less than/greater than/equal to][nn]

- **Scoring:** The Solver will either award or penalize points for each time a duty period contains the specified limit of flight legs.
- **Example:** 100 pts AVOID Legs Per Duty Period greater than 4

If the following pairing is awarded:

D3033	ONLY ON	SUN	B	SE REI	PT: 0'	752L	OP	ERATE	S- MAY	03	ONLY
SU	3199	DTW-TOL	0852	0939	1252	1339	47	46	46		
SU	3153	TOL-DTW	1025	1112	1425	1512	47	48	218		
SU	3168	DTW-YKF	1330	1444	1730	1844	114	113	25		
SU	3166	YKF-DTW	1509	1623	1909	2023	114	115	200		
SU	3201	DTW-TOL	1823	1910	2223	0010	47	46	25		
SU	3202	TOL-DTW	1935	2022	0035	0122	47	48			

The solver would be penalized -200 points. The pairing contains 6 legs -2 in excess than what was specified to avoid.

Notes/Tips: This is a good bid to investigate with the Bid Analyzer filter functions. Make sure to be mindful of the weights used with this bid, as several pairings matching your criteria could multiply the score quickly.

6.3.13 Pairing Class

• Score: 50	pts
Remove	Pairing Class Avoid Pairing Class CDO
	Description Desire (avoid) pairings that are of a specific class.
	Scoring Positive (negative) score applies for every pairing associated with the specified pairing class.
Scope: Reg	Example 10 pts Avoid Pairing Class CDO

Syntax: [DESIRE/AVOID] Pairing Class [CDO/non-CDO]

- **Scoring:** The Solver will either award or penalize points for each time a CDO or non-CDO pairings is awarded, as specified.
- **Example:** 500 pts AVOID Pairing Class CDO

If the pilot is awarded a CDO pairing, the Solver is penalized -500 points.

Notes/Tips: If you wish to avoid a "mixed line" (a regular line constructed of both CDO and non-CDO trips), it is imperative to include this request in your bid. Also, if you are bidding to "AVOID" CDO's, it is recommended to use a high weight.

6.3.14 Pairing Length in Days



Syntax: [DESIRE/AVOID] Pairing Length In Days [greater than/less than/equals]

- **Scoring:** The Solver will either award or penalize points for each time a pairing is awarded that matches the specified length in calendar days. *This also is a Max NN bid, and will score accordingly.
- **Example:** 200 pts DESIRE Pairing Length In Days equals 3 max 2

In this bid, the pilot has expressed that he wants as many 3-day pairings as possible, but only wants the score to apply to a maximum of 2 occurrences. If his line is awarded with four 3-day pairings, the bid will score 400 pts.

Notes/Tips: Remember that you can only use the Max NN expression on one request in your bid per bid session.

6.3.15 Pairing Length in Duration



Syntax: [DESIRE/AVOID] Pairing Length [greater than/less than]

- **Scoring:** The Solver will either award or penalize points for each time a pairing is awarded that matches the specified length in credit hours.
- **Example:** 200 pts DESIRE Pairing Length less than 15h 30m

In this bid, the pilot has expressed that he wants as many pairings that are less than 15h 30m in credit. Each one awarded on his line will score 200 points.

Notes/Tips: Remember to utilize the bid analyzer when adding this request to your bid to see which pairings would be affected.

6.3.16 Specific Flight

⊙ Score: 50	pts
Remove	Specific Flight Desire V Flight DL4710 V
	Description Desire (avoid) a specific flight.
	Scoring Positive (negative) score applies for each occurrence of the specified flight.
Scope: Reg	Example 50 pts Desire Flight 3200

Syntax: [DESIRE/AVOID] Specific Flight [flight number]

- **Scoring:** The Solver will either award or penalize points for each time the specified flight number occurs in any of the pairings awarded to a pilot's line.
- **Example:** 50 pts DESIRE Flight DL1243

If this flight occurs in the pilot's line, the Solver is penalized -200 points.

Notes/Tips: This bid could be utilized to fine-tune a bid for specific pairings. Note that the IATA Carrier Code is used to distinguish flights between carriers (e.g. DL=Delta, NW=Northwest, XJ=Mesaba)

6.3.17 Specific Pairing



Syntax: [DESIRE/AVOID] Pairing [nnnn]

- **Scoring:** The Solver will either award or penalize points for each time the specific pairing is awarded. *This also is a Max NN bid, and will score accordingly.
- **Example:** 200 pts DESIRE Pairing M9001 Max 2

In this bid, the pilot has expressed that he wants as many occurrences of M9001 on his line, but only wants the score to apply to a maximum of 2 occurrences. If his line is awarded M9001 four times, the bid will score 400 pts.

Notes/Tips: Remember that you can only use the Max NN expression on one request in your bid per bid session.

6.3.18 Specific Pairing on Date(s)



Syntax: [DESIRE/AVOID] Pairing [nnnn] on [mmmdd] to [mmmdd]

- **Scoring:** The Solver will either award or penalize points for each time the specific pairing is awarded on a specific date or between a range of dates.
- Example: 200 pts DESIRE Pairing M9001 on Oct 1 to Oct 1

In this example, the pilot is expressing that he wants this pairing only on Oct 1.

Notes/Tips: This bid preference can be used as a conditional bid.

6.3.19 Start at Airport



Syntax: [DESIRE/AVOID] Start at Airport [apt]

- **Scoring:** The Solver will either award or penalize points for each time a pairing's first non-deadhead flight departs from the specified station.
- Example: 200 pts DESIRE Start at Airport STC

In this bid, the pilot has expressed that he wants to be awarded as many pairings as possible that "start" from STC.

Notes/Tips: This is a bid that may be utilized by commuters to have the Solver "filter out" trips which start in your hometown rather than at the domicile.

6.3.20 Stop at Airport



Syntax: [DESIRE/AVOID] Stop at Airport [apt]

Scoring: The Solver will either award or penalize points for each time a pairing's last non-deadhead flight arrives the specified station.

Example: 200 pts DESIRE Stop at Airport STC

In this bid, the pilot has expressed that he wants to be awarded as many pairings as possible that "stop" at STC.

Notes/Tips: This is a bid that may be utilized by commuters to have the Solver "filter out" trips which end in your hometown rather than at the domicile.

6.3.21 Station Turn



Syntax: [DESIRE/AVOID] Turn In [apt]

- **Scoring:** The Solver will either award or penalize points for each time a flight operates through the specified station.
- **Example:** 200 pts AVOID Turn In STC

In this bid, the pilot has expressed that he does not want to be awarded any pairings with turns in STC.

Notes/Tips: This is a "fine tuning" bid. If you know you could end up with either of two trips with almost identical characteristics, this bid can be used as a "decision maker" for the solver.

6.3.22 Station Turn Time



Syntax: [DESIRE/AVOID] Turn In [apt] [greater than/less than] [hh][mm]

- **Scoring:** The Solver will either award or penalize points for each time a flight operates through the specified station greater/less than the specified duration.
- **Example:** 200 pts AVOID Turn In Any Greater Than 2:00

In this bid, the pilot has expressed that he does not want to be awarded any pairings with turns in any station which last longer than two hours.

Notes/Tips: This may be a primary "pairing quality" bid for many pilots. If you wish to avoid long breaks, this is the bid to use. Note that you can specify the bid to apply for "any" station.
6.4 Pairing Layover Requests

6.4.1 Layover Check-In Time

```
    Score: 200 pts
    Layover Check-In Time
Avoid Layover Check-In before 13 : 00 
    Description
Avoid a report time during a pairing (excluding the first day) before, after, or between a specific time criteria.
    Scoring
Negative score applies for each pairing with a layover meeting the specified report time criteria.
    Notes

            Layover Check-In Time is the report time following the overnight (RON).
            The specified time is local to the layover station.

    Scope: Reg Example

            100 pts Avoid Layover Check-In before 09:00
```

Syntax: AVOID Layover Check-In [after/before/between] [hh:mm][hh:mm]

- **Scoring:** The Solver will penalize points for each pairing which meets the specified time criteria
- **Example:** 200 pts AVOID Layover Check-In Before 13:00

In this bid, the pilot has expressed that he does not want to be awarded any pairings with layover show times between 01:00 and 12:59.

Notes/Tips: This is a "fine tuning" bid. If you know you could end up with either of two trips with almost identical characteristics, this bid can be used as a "decision maker" for the solver.

6.4.2 Layover Check-Out Time

Score: 200 pts		
Remove	Layover Check-Out Time Avoid Layover Check-Out before ▼ 13 ▼ : 00 ▼	
	Description Avoid a release time during a pairing (excluding the last day) before, after, or between a specific time criteria.	
	Scoring Negative score applies for each pairing with a layover meeting the specified release time criteria.	
	Notes 1. Layover Check-Out Time is the release time prior to the overnight (RON).	
	2. The specified time is local to the layover station.	
Scope: Reg	Example 100 pts Avoid Layover Check-Out before 19:00	

Syntax: AVOID Layover Check-Out [after/before/between] [hh:mm][hh:mm]

- **Scoring:** The Solver will penalize points for each pairing which meets the specified time criteria
- **Example:** 200 pts AVOID Layover Check-In Before 13:00

In this bid, the pilot has expressed that he does not want to be awarded any pairings with layover duty-off times between 01:00 and 12:59.

Notes/Tips: This is a "fine tuning" bid. If you know you could end up with either of two trips with almost identical characteristics, this bid can be used as a "decision maker" for the solver.

6.4.3 Station Layover



Syntax: [DESIRE/AVOID] Layover in [aaa]

- **Scoring:** The Solver will either award or penalize points for each pairing which has a layover in the specified city/station.
- **Example:** 200 pts AVOID Layover in DSM

If a pairing is awarded with a layover in CVG, the Solver is penalized -200 points.

Notes/Tips: This is a "fine tuning" bid. If you know you could end up with either of two trips with almost identical characteristics, this bid can be used as a "decision maker" for the solver.

6.4.4 Station Layover Duration



Syntax: [DESIRE/AVOID] Layover in [aaa][less than/greater than][hh:mm]

- **Scoring:** The Solver will either award or penalize points for each pairing which has a layover in the specified city/station AND meets the timeframe duration specified.
- **Example:** 200 pts DESIRE Layover in AUS less than 12:00

If a pairing is awarded with a layover in AUS with any length of "TOG" (time on ground) between 0 and 11:59, the pairing will be scored +200 points.

Notes/Tips: Keep in mind that both the station and the duration criteria must be met for this bid to score. This is also a "Max NN" bid.

6.4.5 Station Layover Duration on Date



Syntax: [DESIRE/AVOID] Layover in [aaa] on [mmm d] [less than/greater than][hh:mm]

- **Scoring:** The Solver will either award or penalize points for each pairing which has a layover in the specified city/station on a specific date, AND meets the timeframe duration specified.
- **Example:** 200 pts AVOID Layover in AUS on Oct 1 less than 12:00

If a pairing is awarded with a layover in AUS on Oct 1 with any length of "TOG" (time on ground) between 0 and 11:59, the Solver will be penalized -200 points.

Notes/Tips: Keep in mind that the station, the date of the layover, and the duration criteria must be met for this bid to score.

6.5 Work Requests

6.5.1 Consecutive Working Days

Score: 200 pts		
Remove	Consecutive Working Days greater than 4	
	Description Avoid work period greater than the specific number of days without being awarded a day off.	
	Scoring Negative score applies for every set of consecutive working days that is in excess of the specified number.	
	Notes Can only be used once per bid session.	
Scope: Reg	Example 200 pts Avoid Consecutive Working Days greater than 3.	

Syntax: AVOID Consecutive Working Days greater than [n]

- **Scoring:** The Solver will penalize points for each set of consecutive working days that exceeds the specified limit.
- **Example:** 200 pts AVOID Consecutive Working Days greater than 4

If the pilot is awarded a schedule with 5- or 6-day stretches of work days, the Solver is penalized -200 points for each of the 5 or 6-day stretches.

Notes/Tips: This is a "non-participating" bid for the purposes of using the Bid Analyzer, as it must be scored looking at the entire line in context.

6.5.2 Days Worked

Score: 200 pts		
Remove	Days Worked greater than 15 -	
	Description Avoid work over a specific number of days during the bid period.	
	Scoring Negative score applies for every working day that is in excess of the specified number.	
	Notes Can only be used once per bid session.	
Scope: Reg	Example 500 pts Avoid Days Worked greater than 4.	

Syntax: AVOID Days Worked greater than [n]

- **Scoring:** The Solver will penalize points for each working day that exceeds the specified limit.
- **Example:** 200 pts AVOID Days Worked greater than 15

If the pilot is awarded a schedule with 16 or more days of work, the score is penalized -200 points for each of the excessive days.

Notes/Tips: This bid can only be expressed one time in a month. You will not be able to express it multiple times with different weights. This is a "non-participating" bid for the purposes of using the Bid Analyzer, as it must be scored looking at the entire line in context.

6.5.3 Work on Date



Syntax: AVOID/DESIRE Work On [mmm dd]

Scoring: The Solver will either award or penalize points if the specified date is awarded with any duty.

Example: 200 pts AVOID Work on Dec 25

If the pilot is awarded a schedule with any duty activity or pairing which touches Dec 25, the Solver will be penalized -200 points.

Notes/Tips: This bid may be used as a conditional bid ("reserve down to").

6.5.4 Work on Day



Syntax: AVOID/DESIRE Work On [ddd]

Scoring: The Solver will either award or penalize points if the specified day of the week is awarded with any duty.

Example: 200 pts AVOID Work on Mon

If the pilot is awarded a schedule with any duty activity or pairing which touches any Monday within the bid period, the Solver will be penalized -200 points. The score can multiply based on the number of occurrences within the month (i.e. if three Mondays were scheduled with duty, the score would be -600)

Notes/Tips: This bid may be used as a conditional bid ("reserve down to").

6.5.5 Work Period Check-In Time

Score: 200 pts	
Remove	Work Period Check-in Time Avoid Work Period Check-in Time Before 10 ▼ : 00 ▼
	Description Avoid work periods having a report time before a specific time after a calendar day off or a ground activity. A work period is a series of work activities (one or more) scheduled back-to-back between days off.
	Scoring Negative score applies for every work period which has a report time before the specified time.
Scope: Reg	Example 100 pts Avoid Work Period Check-in Time Before 09:00

Syntax: AVOID Work Period Check-In Time Before [hh:mm]

- **Scoring:** The Solver will be penalized points if an awarded work period has a check-in (show/on-duty time of the first day of the work period) before the specified time.
- **Example:** 200 pts AVOID Work Period Check-In Time Before 10:00

If the pilot is awarded a schedule which has any work period containing a show time on the first day between 00:01 and 09:59, the Solver is penalized -200 points.

Notes/Tips: It is important to remember the definition of a "Work Period" when working with this bid. A work period may be comprised of several separate duty activities (trips, reserve days, training activities) that are contiguous and not separated by days off. This can be an important bid for commuters to include in their bids, if they know their commuting routine prevents them from arriving in domicile earlier than a specific time.

6.5.6 Work Period Check-Out Time

Score: 200 pts	
Remove	Work Period Check-out Time
	Description Avoid work periods having a release time after a specific time of the day before a calendar day off or a ground activity. A work period is a series of work activities (one or more) scheduled back-to-back between days off.
	Scoring Negative score applies for every work period which has a release time after the specified time.
Scope: Reg	Example 100 pts Avoid Work Period Check-out Time After 19:00

Syntax: AVOID Work Period Check-Out Time After [hh:mm]

- **Scoring:** The Solver will be penalized points if an awarded work period has a check-out (off-duty time of the last day of the work period) after the specified time.
- **Example:** 200 pts AVOID Work Period Check-In Time After 18:00

If the pilot is awarded a schedule which has any work period containing a duty-off time on the last day between 18:01 and 24:00, the Solver is penalized -200 points.

Notes/Tips: It is important to remember the definition of a "Work Period" when working with this bid. A work period may be comprised of several separate duty activities (trips, reserve days, training activities) that are contiguous and not separated by days off. This can be an important bid for commuters to include in their bids if they need to catch a commuting flight home by a specific time.

6.5.7 Work Periods

Score: 50	pts
Remove	Work Periods Avoid Work Periods
	Description Avoid the number of work periods in the bid period. A work period is a series of work activities (one or more) scheduled back-to-back between days off.
	Scoring Negative score applies for each series of working days.
Scope: Reg	Example 200 pts Avoid Work Periods

Syntax: AVOID Work Periods

- **Scoring:** The Solver will be penalized points for each work period awarded on the pilot's line.
- **Example:** 50 pts AVOID Work Periods
- **Notes/Tips:** Again, understanding that a work period is a string of duty activities broken only by days off, this is another bid that can be utilized to minimize the number of commutes to work.

6.6 Quality of Life Requests

6.6.1 Carryout Days

Score: 100 pts

Remove	Carryout Days Desire ▼ Carryout Days greater than ▼ 3 ▼
	Description Desire (avoid) pairings that operate into the next bid period by a specific number of days.
	Scoring Positive (negative) score applies for each day greater than or less than the specified number of days.
Scope: Reg	Example 500 pts Avoid Carryout Days greater than 1

Syntax: AVOID/DESIRE Carryout Days [less than/greater than] [n]

- **Scoring:** The Solver will either award or penalize points if the specified number of carryout days of a pairing are awarded on the line.
- **Example:** 100pts DESIRE Carryout Days greater than 3

In this bid, the pilot is requesting the maximum available carryout days (since pairings are no longer than 4 days in length). If the Solver awards a 4-day pairing which commences on the last day of bid month, the score will be increased by 300 points (100 points for each of the 3 days which carryout into the following bid month)

Notes/Tips: Remember that when bidding for carryout days, you will be essentially bidding for schedule credits which will only be applied in the next month.

6.6.2 Carryout Hours

Score: 100 pts	
Remove	Carryout Hours Desire Carryout Hours greater than 4 • : 00 •
	Description Desire (avoid) pairings that operate into the next bid period by specific time duration.
	Scoring Positive (negative) score applies for each hour greater than or less than the specified number of hours.
Scope: Reg	Example 50 pts Avoid Carryout Hours greater than 17:00

Syntax: AVOID/DESIRE Carryout Hours [less than/greater than] [hh:mm]

Scoring: The Solver will either award or penalize points if the specified number of carryout hours of a pairing are awarded on the line.

Example: 100pts DESIRE Carryout Hours greater than 4:00

The score will be increased 100 points for each full hour over 4:00. The solver will calculate carryout hours beginning on the first duty period of the carryout pairing awarded which exists in the following bid month.

Notes/Tips: Remember that when bidding for carryout hours, you will be essentially bidding for schedule credits which will only be applied in the next month.

6.6.3 Fly With

Score: 50	pts
Remove	Fly With Desire - Fly With 99999
	Description Desire (avoid) flying with another flight crewmember.
	Scoring Positive (negative) score applies for each block hour assigned with the specified crewmember.
Scope: Reg	Example 50 pts Desire Fly With 12345

Syntax: AVOID/DESIRE Fly With [nnnnn]

- **Scoring:** The Solver will either award or penalize points if a First Officer is awarded a pairing with the indicated Captain (identified by employee number). The score will increase incrementally by the block hour the crewmembers are paired together.
- **Example:** 50pts DESIRE Fly With 99999

If the First Officer is awarded a 4-day pairing worth 20:00 block hours, and during the entire pairing he will be paired with Captain 1234, the Solver will award him 2000 points.

Notes/Tips: This bid will only be practically scored by the solver for First Officers. This is because for each "category" (equipment+domicile), the Lineholder solutions are run by Crew Planning before the First Officer solutions. <u>When entering employee numbers, no leading</u> <u>zeros are required</u>.

6.6.4 Home Base Rest

Score: 50 pts	
Remove	Home Base Rest Avoid Home Base Rest less than 15 • : 00 •
	Description Avoid rest in domicile less than the specific time.
	Scoring Negative score applies for each occurence of rest in domicile less than the specified duration.
Scope: Reg	Example 100 pts Avoid Home Base Rest less than 14:00

Syntax: AVOID Home Base Rest less than [hh:mm]

- **Scoring:** The Solver will penalize points if the specified number of home base rest hours of an in-domicile rest period between pairings is not met.
- **Example:** 50pts AVOID Home Base Rest less than 15:00
- **Notes/Tips:** This bid will generally be satisfied for all pairing which are followed by a day off. However, if for example two pairings comprise a complete work period, the rest period following the first pairing will be evaluated by the solver to see if the criteria have been met.

6.6.5 Pairings

Score: 50 pts		
Remove	Pairings Desire ▼ Pairings	
	Description Desire (avoid) a maximum (minimum) number of pairings in the bid period.	
	Scoring Positive (negative) score applies once for every assigned pairing.	
	Notes Can only be used once per bid session.	
Scope: Reg	Example 400 pts Desire Pairings.	

Syntax: AVOID/DESIRE Pairings

- **Scoring:** The Solver will either award or penalize points for each awarded pairing on the line.
- **Example:** 50pts AVOID Pairings

If the pilot's line is awarded 4 separate pairings, the Solver is penalized -400 points.

Notes/Tips: This is a pure "desire/avoid" bid. For a DESIRE bid the Solver will find the most optimal solution which grants the MOST pairings to the pilot. This will most likely mean pairings which are short in duration. An AVOID bid will cause the Solver to find the least number of pairings which will still allow the pilot's line to be constructed within the credit constraints of the default line range. This will most likely mean pairings which either (a) are high in credit, or (b) have longer durations, or both.

6.7 **Productivity Requests**

6.7.1 Credit

⊙ Score: 10 pts	
Remove	Credit Desire ♥ Credit
	Description Desire (avoid) maximum (minimum) number of credit hours for the bid period.
	Scoring Positive (negative) score applies for each credit hour (rounded to the nearest hour) assigned.
Scope: Reg	Example 10 pts Avoid Credit

Syntax: AVOID/DESIRE Credit

- **Scoring:** The Solver will either award or penalize points for each hour of schedule credit awarded on the line.
- **Example:** 10 pts DESIRE Credit

If the pilot's line is awarded with 90 hours of schedule credit, the score would be 900 points.

Notes/Tips: This is a very powerful request to add to your bid because of the multiplying effect. Be careful not to weight this bid in such a way that would "drown out" the scores of other weighted preferences.

In addition, for pilots who wish to utilize the "Maximum Line Range" option, this bid can be utilized to drive the Solver to award more credit – as closely as it can to the maximum of 105 hours of schedule credit for Maximum Line Range.

6.7.2 Line Credit



Syntax: DESIRE Line Credit [greater than/less than/between] [hh:mm][hh:mm]

Scoring: The Solver will award the specified points when the line meets the specified schedule credit criteria.

Example: 500 pts Desire Line Credit greater than 92 hours

If the pilot's line is awarded with more than 92 hours of schedule credit, the score would be 500 points.

Notes/Tips: Be sure to check the estimated line construction parameters in the bid package when utilizing this bid. The limitations of the estimated default line range/maximum line range parameters will always have precedence in building your line, regardless of how you bid. For example, if the estimated default line range will be 70-90, a bid to desire 92 hours could not be satisfied without also selecting the "Maximum Line Range" option (which allows the Solver to build the line up to 105 hours of credit).

6.7.3 Load Schedule



Syntax: DESIRE Load Schedule [Beginning/Middle/End]

The Load Schedule bid option is used to concentrate the <u>duty days</u> at the beginning, middle or end of the month. For example, if you are bidding for the month of March and you have vacation at the beginning of April, you can use Load Beginning to be awarded as many days off as possible at the end of March.

Load Beginning

The score applies once for each consecutive day off in the bid period starting from the last.

Example: 100 pts Desire Load Beginning

In the above example, every consecutive day granted off at the end of the line will score 100 pts, as the Solver will load the beginning of the line with duty days. The Solver will work from the end of the month *backwards* in its scoring scheme. In other words, if the line was awarded with the 31st back through the 20th off (12 consecutive days off), the score would be +1200 points for the example bid.

Load Middle

The score applies with full weight for the first scored days at both ends of the bid period but the value of the weight decreases 10 % with each consecutive day off leading towards the middle of the month. This is done to properly balance the distribution of days off at both ends of the bid period. This also means that when you bid Load Middle, only the first 10 days off at both ends of the bid period will score.

Example: 100 pts Desire Load Middle

In the above example, this crewmember would like to concentrate work duties in the middle of the bid period and therefore have more days off at the beginning and at the end of the bid period. In the above example, if you only get the first and the last day of the bid period off, each day will score the defined weight (total of 200 pts).

If you get the first three days of the bid period off, the days will score as follows: First day of the period off = 100 pts Second day of the bid period off = 90 (100 pts * 0.9) Third day of the bid period off = 80 (100 pts * 0.8) Total Score = 270 pts

So in case of two days off, the solver would prioritize the first and the last day off (200 pts) instead of the first two days off (100+90 pts)

***Note:** If the solver is unable to award any days off at the beginning of the bid period it will award days off at the end of the bid period.

To better illustrate the scoring schema for Load Middle, consider the following table, using the bid example at the top of the page:

	_		
Date Off	Score	Pre-Requisite	
May 4th	100 pts		
May 5th	90 pts	May 4th off	
May 6th	80 pts	May 4th – May 5th Off	
May 7th	70 pts	May 4th – May 6th Off	
May 8th	60 pts	May 4th – May 7th Off	
May 9th	50 pts	May 4h – May 8th Off	
May 10th	40 pts	May 4th – May 9th Off	
May 11th	30 pts	May 4th – May 10th Off	
May 12th	20 pts	May 4th – May 11th Off	
May 13th	10 pts	May 4th – May 12th Off	
May 14th	0 pts		
May 15th	0 pts		
May 16th	0 pts		
May 17th	0 pts		
May 18th	0 pts		
May 19th	0 pts		
May 20th	0 pts		
May 21st	0 pts		
May 22nd	10 pts	May 23rd – May 31st Off	
May 23rd	20 pts	May 24th – May 31st Off	
May 24th	30 pts	May 25th – May 31st Off	
May 25th	40 pts	May 26th – May 31st Off	
May 26th	50 pts	May 27th – May 31st Off	
May 27th	60 pts	May 28th – May 31st Off	
May 28th	70 pts	May 29th - May 31st Off	
May 29th	80 pts	May 30th – May 31st Off	
May 30th	90 pts	May 31st Off	
May 31st	100 pts		

Load End:

The score applies once for each consecutive day off in the bid period starting from the beginning of the month.

Example: 100 pts Desire Load End

In the above example, every consecutive day granted off at the beginning of the month will score 100 pts, as the solver will load the end of the line with duty days.

Notes/Tips: For any of these above options, the first day from the beginning of the month considered for scoring the "Load End" and "Load Middle" options is the first day after a "non-duty" activity at the beginning of the bid period. Likewise, the first day from the last day considered for the scoring of "Load Beginning" and "Load Middle" options is the day before a non-duty activity at the end of the bid period.

If you had a vacation which carried-in from the previous month, and ended on the 5th of the bid month, the 6th would be the first day the Solver will consider for this bid. *This is different logic from typical day off scoring*. Non-duty activities (leaves of absence, vacation) are typically scored as days off – but not in this case. This special rule allows the Load Schedule bid to be effective when bidding to extend days off after vacation or leave.

You may consider using the "Allow Single Day Off" bid option in conjunction with the Load Schedule bid. If the Solver can maximize the score of Load Schedule by only placing single days off between your work periods, it will.

6.7.4 Maximize Hour Per Day



Syntax: DESIRE Maximize Hour Per Day

- **Scoring:** The Solver will award points by multiplying the productivity of the entire line by the weight. Productivity is determined by dividing the total schedule credit for the line by the number of working days on the line.
- **Example:** 50 pts Desire Maximize Hour Per Day

If the pilot's line is awarded 80 hours of schedule credit over 15 working days, the productivity would be 5.33 hrs/dy. $5.33 \times 50 = 266.5$ pts.

Notes/Tips: This bid drives the Solver to maximize the amount of credit awarded on a daily basis. Unfortunately, this is not an attribute that can be accurately modeled for this request in the Bid Analyzer, where the bids are looked at on an individual pairing basis. *Maximize Hours Per Day* can only be properly evaluated on a whole-line basis.

When using this request in your bid, be aware of these common effects:

- In order to maximize productivity, the Solver may drive your award toward shorter trips (day trips/two days).

- If the Solver can find credit on your line, it will. This includes "artificial" or "soft credits" such as Min Day, credits for deadhead legs, and training events.

6.7.5 TAFB (Time Away From Base)



Syntax: DESIRE/AVOID TAFB

- **Scoring:** The Solver will award or penalize the specified points for each hour of TAFB.
- **Example:** 5 pts Desire TAFB

If the pilot's line is awarded 300 hours of TAFB, the score would be 1500 points.

Notes/Tips: Remember the multiplying effect of this bid, and be sure to weight the bid appropriately so it's score does not "drown out" your other requests,

6.8 Reserve Requests

6.8.1 Reserve Scope Selection

When the Bid Scope Selector is selected to "Reserve," the bid options that are available to be added to a pilot's bid if awarded a reserve line are filtered into the Bid Option Class selector. These bids do not change in functionality from how they are used in the context/scope of a Regular line.

The bid options available in Reserve Scope are:

Date and Time Off Requests

Consecutive Days Off Day of Week Off Period of Dates Off Period of Days Off Specific Date Off String of Dates Off String of Dates Off Weekends Off

<u>Work Requests</u> Consecutive Working Days Days Worked Work Period

Productivity Requests Load Schedule

<u>Reserve Requests</u> Reserve Day of Week Reserve Line Specific Reserve Date

6.8.2 Reserve Day of Week

0 pts
Reserve Day Of Week Desire Reserve Day On Mon →
Description Request a recurring day of the week on reserve (e.g. MO, TU, WE, etc).
Scoring Positive score applies for each specified day of week in reserve awarded.
Example 100 pts Desire Reserve Day on MO

Syntax: DESIRE Reserve Day on [ddd]

- **Scoring:** The Solver will award the specified points for each specified day of the week that the pilot is awarded reserve duty.
- **Example:** 50 pts Desire Reserve Day on Mon

If the pilot's line is awarded reserve on 4 Mondays, the score would be 200 points.

Notes/Tips: This bid will only be considered if the Solver determines that the pilot will be awarded a reserve line.

6.8.3 Reserve Line

Remove	Reserve Line Desire Reserve Line		
	Description Request to be awarded a reserve line.		
	Notes This is not a weighted preference.		
Scope: Rsv	Example Desire Reserve Line		

Syntax: DESIRE Reserve Line

Scoring: This is a "non-weighted" bid preference.

Example: DESIRE Reserve Line

This pilot desires only to be considered for a reserve line by the Solver (even if he is senior enough to hold a regular line). So long as a reserve line is available to be held at his level of seniority, the Solver will grant this request.

Notes/Tips: This bid will not show up on the Single Line Report, as it is utilized only for determining which type of line the pilot will receive. Also, remember that the CDO Line Award process will "trump" the consideration of this bid. In other words, <u>make sure you have no</u> <u>bids for CDO lines entered if you desire a reserve line.</u>

6.8.4 Specific Reserve Date

• Score: 50	pts
Remove	Specific Reserve Date Desire Reserve Date On Jan 1 ▼
	Description Request a specific date on reserve.
	Scoring Positive score applies for each specified date in reserve awarded.
Scope: Rsv	Example 100 pts Desire Reserve Day on 01/07

Syntax: DESIRE Reserve Date On [mmm dd]

- **Scoring:** The specified points are awarded if the pilot is scheduled for reserve duty on the requested date.
- **Example:** 100 pts DESIRE Reserve Date on Jul 18

If the pilot's awarded reserve line contains reserve duty on July 18th, the score is 100 points.

Notes/Tips: This bid will only be considered if the Solver determines that the pilot will be awarded a reserve line.

6.9 Short Term Training Requests

Although bidding for Short Term Training events is only active during the Early Bid, pilots may enter Short Term Training requests whenever a monthly bid session is active (open) or at any time in their Standing Bid.

When the Solver is processing the Short Term Training event award, it will consider any of the bid requests described in this section. In addition, it will consider the "Time Off" requests listed below:

- Weekends Off
- Day of Week Off
- Partial Day of Week
- Specific Date Off
- Partial Date Off
- Period of Days Off
- String of Days Off

Every Short Term Training request is made specifically for a particular Short Term Training event. The events are denoted by a three-letter designator as follows:

Code	Event
RGI	Recurrent Ground School – In Domicile
RGO	Recurrent Ground School – Out of Domicile
P1I	Proficiency Check w/o Oral Exam – In Domicile
P10	Proficiency Check w/o Oral Exam – Out of Domicile
P2I	Proficiency Check w/ Oral Exam – In Domicile
P2O	Proficiency Check w/ Oral Exam – Out of Domicile
RFI	Recurrent Flight Training – In Domicile
RFO	Recurrent Flight Training – Out of Domicile

The Short Term Training requests are only available in the Option Class Selector when in Regular Bid Scope. In addition, the "Time Off" requests will only be considered when entered in Regular Bid Scope.

NOTE 1 If you enter a Specific Monthly Bid (with Time Off and STT requests) during the Early Bid for STT events, the bid remains in place for the processing of the Monthly Bid. You will have the ability to modify and re-save your Specific Monthly Bid after the Monthly Bid is opened.

NOTE 2 When bidding for a short term training event, and a travel day(s) (TVL/TVS) is associated with the training slot, the Solver *ONLY* looks at the date and time scheduled for the actual training event. In other words, the travel days are NOT considered a part of the slot for the purposes of bidding in PBS. Here is an example:

E3C/E3F	Oct			
	Thu	Fri	Fri	
Date	8	9	9	
ltem	TVL	RPC	TVS	
ChkIn	1313-1625	0600-1300	1520-1754	
Loc		SF3_1		

If the following slot is published in the bid package

The correlating slot listed on the Training Slot Report from the PBS Crew Interface is:

Category	Slot Type	Slot Name	Start Date	End Date
MEM_SF3_CA	RGO	Room 1100	2009/10/06 12:00	2009/10/09 17:00
MEM_SF3_CA	RGO	Room 1100	2009/10/06 12:00	2009/10/09 17:00
MEM SF3 CA	RGO	Room 1100	2009/10/06 12:00	2009/10/09 17:00
MEM_SF3_CA	P10	SF3_1	2009/10/09 06:00	2009/10/09 13:00
MEM_SF3_CA	REO	SF3_1	2009/10/09 12:00	2009/10/09 18:00
MEM_SF3_CA	P10	SF3_1	2009/10/13 06:00	2009/10/13 13:00

Note that in the Training Slot Report only shows the date and time for the PC, not the travel days. If a pilot were to bid "DESIRE Training Event Type P1O Starting from Oct 8 to Oct 8", the Solver would not consider this slot as one the pilot desires – because to the Solver, the slot starts on October 9th, not the 8th.

One other consideration to keep in mind is whether or not you have a vacation slot awarded in the same month you are due for a PC or RFT. The CBA prohibits the award of a PC/RFT slot within seven days following a vacation. You may <u>waive</u> this prohibition by selecting the option "Allow PC/RFT Within 7 Days Following Vacation" in the "Other Options" tab. (See 6.10.3 for details)

6.9.1 Training Event Ending Times



Syntax: [DESIRE/AVOID] Training Event Type [ttt] Ending [before/after/between] [hh:mm] to [hh:mm]

- **Scoring:** The specified points are awarded or penalized if the pilot is awarded the specified training event which ends during the specified time of day.
- Example: 100 pts DESIRE P10 Ending Before 14:00

6.9.2 Training Event Operating on Dates



Syntax: [DESIRE/AVOID] Training Event Type [ttt] Operating From [mmmd] to [mmmd]

- **Scoring:** The specified points are awarded or penalized if the pilot is awarded the specified training event during the specified date(s).
- Example: 100 pts AVOID P10 Operating from Sep 1 to Sep 7
- **Notes/Tips:** This bid can be used to specify a single date, or a range of dates. This bid is only considered in the short term training event solution.

6.9.3 Training Event Operating on Day of Week



Syntax: [DESIRE/AVOID] Training Event Type [ttt] Operating on [ddd]

- Scoring: The specified points are awarded or penalized if the pilot is awarded the specified training event during the specified day of the week.
- **Example:** 100 pts AVOID P10 Operating on Sun

6.9.4 Training Event Operating on Weekends



Syntax: [DESIRE/AVOID] Training Event Type [ttt] Operating on Weekends

- **Scoring:** The specified points are awarded or penalized if the pilot is awarded the specified training event between 0001 Saturdays and 2400 Sundays.
- **Example:** 100 pts AVOID P10 Operating on Weekends

6.9.5 Training Event Operating Within Times



Syntax: [DESIRE/AVOID] Training Event Type [ttt] Operating from [hh:mm] to [hh:mm]

- **Scoring:** The specified points are awarded or penalized if the pilot is awarded the specified training event during the specified times.
- **Example:** 100 pts AVOID P1O Operating from 09:00 to 13:00

6.9.6 Training Event Starting on Dates



Syntax: [DESIRE/AVOID] Training Event Type [ttt] Starting From [mmmd] to [mmmd]

- **Scoring:** The specified points are awarded or penalized if the pilot is awarded the specified training event which starts on the specified dates.
- **Example:** 100 pts AVOID P10 Operating on Sun
6.9.7 Training Event Starting Times



Syntax: [DESIRE/AVOID] Training Event Type [ttt] Starting [before/after/between] [hh:mm] to [hh:mm]

- **Scoring:** The specified points are awarded or penalized if the pilot is awarded the specified training event which starts during the specified time of day.
- **Example:** 100 pts DESIRE P1O Starting Before 14:00

Notes/Tips: This bid is only considered in the short term training event solution.

6.10 Other Options

т	ext View Calendar View Other Options CDO Line Reserve Line Type
	Allow Single Day Off Allow Single Day Off
	Enable Maximum Line Range Enable Maximum Line Range
	Allow PC or RFT Within 7 Days Following Vacation Allow PC or RFT Within 7 Days Following Vacation
	Ready Reserve AM Shift Preference Ready Reserve AM Shift Preference
	Ready Reserve PM Shift Preference Ready Reserve PM Shift Preference
	Non CDO Pairing First Out Preference Non continuous duty overnight Pairing First Out Preference
	Non CDO Pairing Last Out Preference Non continuous duty overnight Pairing Last Out Preference
	CDO Pairing First Out Preference continuous duty overnight Pairing First Out Preference
	CDO Pairing Last Out Preference continuous duty overnight Pairing Last Out Preference
	Volunteer To Perform Ready Reserve Volunteer To Perform Ready Reserve
	Volunteer To Perform Out Of Base Reserve Volunteer To Perform Out Of Base Reserve
	Allow For Trip Substitution Allow For Trip Substitution

The "Other Options" tab contains a set of bid options that can be added to a pilot's overall bid. They apply to the overall bid without weighting, and without regard to bid scope (regular or reserve).

6.10.1 Allow Single Day Off

The "Allow Single Day Off" option can be selected if you want to allow the Solver additional flexibility on the numbers of days off it places between work periods. The Mesaba ALPA Collective Bargaining Agreement prohibits single days off between work periods with the exception of the first and last day of the bid period, and when this option is selected by the pilot in his bid.

There is no limit on how many times the Solver will award a single day off on a pilot's line when this option is enabled. <u>However the Solver will *only* grant</u> additional single days off between work periods if it causes an increase in pilot bid satisfaction.

One final reminder: If you DO NOT want any single days off between trips (other than the contractually allowed first and last days of the bid period) then DO NOT USE THIS OPTION!

6.10.2 Enable Maximum Line Range

Regular lines will always be built by the Solver to comply with the parameters for the Default Line Range for schedule credit. However, if the pilot has a preference to be awarded a line of flying which exceeds the Default Line Range this option can be used.

By selecting "Enable Maximum Line Range" in your bid, the Solver is <u>allowed</u> to build your line up to a maximum of 94 block hours and 105 schedule credit hours. The option *does not* "drive" your line to these numbers – it simply un-restricts the Solver from the Default Line Range parameters. In order to receive more flying and/or credit time, you will need to add preferences to your bid such as:

- Desire Credit
- Desire Line Credit (greater than x)
- Maximize Hours Per Day

Keep in mind that global constraints still govern the construction of the line (e.g. flying needs to be available to satisfy your preferences, schedule construction and hours of service rules still apply, etc.)

6.10.3 Allow PC or RFT Within 7 Days of Vacation

This bid option is evaluated by the Solver during the Early Bid process of awarding short term training events. The Mesaba ALPA Collective Bargaining Agreement prohibits the scheduling of a PC or RFT during the 7 day period immediately following an awarded vacation. However, his can be waived by the pilot.

6.10.4 Reserve Options

There are six options available in the Other Options tab for pilots to indicate their preference for Ready Reserve contact periods and First Out/Last Out contact preferences. These options are granted in seniority order. When a pilot is awarded a reserve line these options are not expressed as an "award." Instead, a report is generated for Crew Scheduling to use in day-to-day scheduling for reserves.

6.10.4.1 Reserve Period Preferences

Two types of reserve period preferences can be expressed in the Other Options Tab: preference for First-Out/Last-Out and preferences for Ready Reserve Period. Remember that there are selections for assignment of CDO and non-CDO pairings as a reserve pilot. Here is an explanation of what each option means:

Ready Reserve AM Shift Preference

Check this box if you prefer the AM shift for ready reserve if you are assigned ready reserve.

Ready Reserve AM Shift Preference

Check this box if you prefer the PM shift for ready reserve if you are assigned ready reserve.

Non-CDO Pairing First Out Preference

Check this box if you want to be called first for reserve assignments to non-CDO "day trip" or "multi-day trip" flying.

Non-CDO Pairing Last Out Preference

Check this box if you want to be called last for reserve assignments to non-CDO "day trip" or "multi-day trip" flying.

CDO Pairing First Out Preference

Check this box if you want to be called first for reserve assignments to CDO "high speed" flying.

CDO Pairing Last Out Preference

Check this box if you want to be called last for reserve assignments to CDO "high speed" flying.

6.10.4.2 Volunteer for Out-of-Base Reserve

Check this option if you wish to volunteer to perform reserve duty out of your domicile.

6.10.5 Allow for Trip Substitution

Check this bid option if you want to alert Crew Planning that they may substitute a trip (or trips) during the last three (3) days of the current month (prior to the month you are bidding for) for trip(s) with fewer block hours to avoid a 30-in-7 or other FAR/contract rest limitation. Details of how this option is utilized can be found in the CBA.

6.11 Special Bid Functionalities

6.11.1 Max NN (a.k.a. "Max Quantity")

Max NN (where "NN" is a placeholder for a number) is a special bid function that can help fine-tune the expression of certain preferences that score by the occurrence. Max NN tells the Solver to stop awarding points when the number of occurrences has reached the specified "NN" limit. The Max NN expression does not *block* the solver from awarding more occurrences of the desired preference, but instead removes the incentive to award more occurrences due to the removal of score.

Example:

"100 points Desire Pairing M3022 Max 02"

When this bid is evaluated, the Solver will attempt to award as many occurrences of pairing M3022 when constructing the pilot's line. However, only the first two occurrences of the pairing will receive a score. Therefore, the bid will not score more than 200 points even if pairing M3022 is awarded three or more times. Logically, the Solver has "no incentive" to award more than two occurrences, and will more than likely stop awarding the pairing after the second occurrence.

Max NN is available only with these bid options, and only in the "DESIRE" context:

- Specific Pairing
- Pairing Length in Days
- Station Layover
- Station Layover Duration

6.11.2 Conditional Bidding (a.k.a. "Reserve Down To")

Conditional Bidding is an alternative bidding and solving process of PBS which allows a pilot to express a preference that they absolutely want satisfied as a regular line holder – and if it cannot, to be given a reserve line at a given level of seniority amongst reserves.

Example:

To make a bid into a conditional bid from the Bid Refinement Window, you will need to select the "Reserve down to" radio button:

◎ Score:	Reserve down to 10 ▼ slot
Remove	Work On Date Avoid ▼ Work On Dec 25 ▼
	Description Request to (not) be awarded work (pairings) that touch a certain date.
	Scoring Positive score applies if any granted pairing touches the date that you desire work on. Scores negatively if any granted pairing touches the date you want to avoid work on.
Scope: Reg	Example 500 pts Avoid Work on 12/25

When the conditional bid is listed in the Bid List of the Bid Entry Pad, it looks like this:

Bid Scope: 💿 Regular 🔘 Reserve							
Text View	Other Options	CDO Line	Reserve Lin	е Туре			
Reserve down to 1	0 Reg Avoid Work On De	c 25	*	Select All Unselect All Edit Duplicate Delete Delete All Sort			
4			4				

In the example above, the pilot has expressed that he does not want to be awarded duty on December 25th on a regular line. If the Solver cannot satisfy this request, the pilot will accept one of the first ten reserve lines (1 through 10).

So how does the Solver process this bid? The first determination the Solver will need to make is whether the pilot will receive a regular line or a reserve line:

- 1. First the Solver evaluates whether or not the pilot's conditional bid can be satisfied on a regular line.
- 2. If not, the Solver will evaluate if a reserve line is available at the level of seniority for the pilot, and in accordance with the level of seniority amongst reserve pilots bid by the pilot.
- 3. If the Solver finds that a reserve line is not available for the pilot, the Solver makes a final determination that the pilot will receive a regular line in accordance with *all other bid preferences (but excluding the preference that was conditional).*

An important point to keep in mind is that the conditional bid is NOT considered automatically in the reserve line scope if the Solver determines it will award a reserve line.

In considering whether or not to use a conditional bid, ask these questions:

- 1. Is what I want the most important preference in my overall bid?
- 2. Am I willing to sacrifice a regular line that doesn't have what I want for a reserve line that has a chance of having what I want?
- 3. Am I willing to sacrifice a regular line for a reserve line, even if I don't get what I want?

If you answered "NO" to any one of these questions, we recommend not utilizing a conditional bid. If you answered "YES" to Question #1, and "YES" to either #2 or #3, a conditional bid may work for you, depending on whether you think your bid will be satisfied as a reserve line holder.

This brings an aspect of "weighing the odds" with a conditional bid. Let's return to our example to demonstrate what this means:

"AVOID Work on December 25th Reserve Down to 10"

For the sake of this example, we will assume that the pilot has the seniority to hold a regular line. We will further assume that according to the estimated PBS parameters published in the Monthly Bid Package, Crew Planning intends to have the Solver award between 10-20 reserve lines. By making this a conditional bid with the expression "Reserve Down to 10" the pilot has decided that he will accept a reserve line ONLY if it is one of the top 10 reserve lines in seniority order. In this case, the pilot is willing to bet that if he is awarded a reserve line, only the top 10 reserve lines will have the seniority to hold December 25th off.

By understanding what level of seniority you will be able to hold a reserve line at, and at what level of seniority your bid preference will be satisfied, you can construct a conditional bid that targets your highest priority preference in both regular and reserve line scope. This bidding strategy is most effective for pilots who have "middle-of-the-pack" seniority in their position.

It is important to set up your overall bid with preferences in regular and reserve line scope, since you have a chance of getting either type of line. Here is an example:

Regular

Avoid Work On Dec 25		
Desire Weekends Off		
Desire Days Off		
Desire String Dec 26 to Dec 23 Off		
Desire String Dec 24 to Dec 27 Off		
Avoid Pairing Class CDO		

Reserve

1000 pts	Desire Weekends Off
1000 pts	Desire Dec 25 Off
450 pts	Avoid Days Worked greater than 18
100 pts	Desire String Dec 24 to Dec 27 Off
100 pts	Desire String Dec 26 to Dec 23 Off
50 pts	Avoid Consecutive Working Days greater than 4

In this example bid, the same preferences (in essence) are expressed in regular scope and reserve scope.

The bids that have the conditional bid option are:

- Weekends Off
- Period of Dates Off
- Period of Days Off
- Partial Day of Week Off
- Partial Date Off
- Period of Partial Days Off
- Period of Partial Dates Off
- Specific Pairing On Dates
- Work on Date
- Work on Day

7 Bidding Techniques and Strategies

7.1 Common Mistakes

• You have a completely blank bid. If you never <u>save</u> any bid for the month your standing bid will be used.

Result: You are awarded a line based on your Standing bid, unless you don't have one. In that case then the Default Bid (50 points desire Days off) will be used. **MAKE SURE TO SAVE YOUR BIDS!**

• You leave part of your bid blank.

Result: Your awarded line is nothing like you expected.

Your bid is made up of bid options from different areas in the Crew Interface. There are two distinct scopes of bids that can be requested (regular and reserve). In addition, the "CDO Line" and "Other Options" tabs may include important bid options that you need to utilize to fully express your bid.

Every pilot is encouraged to always specify regular line scope bids. If you bid for reserve, and cannot hold it, you need to have preferences listed for the possibility of being awarded a regular line. *Note – if you have no regular line preferences in your bid, but you do have some reserve line preferences, and are awarded a regular line, the Default Bid *will not be applied*. Instead, the Solver will simply build a line in accordance with global constraints.

This same logic applies to CDO line bidding. If you want a CDO line, make sure to bid accordingly in the CDO Line Tab. However, if your seniority does not allow you to be awarded a CDO line, the Solver will still consider you for either a regular or reserve line. Make sure to enter bid preferences for regular and reserve lines in case this occurs!

• You bid for specific trips, but did not check the legalities.

Result: Most of the trips you bid for are awarded, but some additional "filler" trips were added to make the line legal.

Some pilots bid by "hand-building" themselves a line of specific pairings. For example, let's say a pilot chooses four different 4-day trips that operate on specific dates. However, if these trips do not fit together legally (exceeding line range limits, block caps, day off limits, more than 29 hours in 7 days, etc.) the Solver will be forced to choose a different trip, or to add other non-requested trips, to make the line legal.

• You didn't read the pairing bid package or use the Bid Analyzer

Result: The specific trips you bid for are not awarded.

Be sure you verify in the bid package or the Bid Analyzer when trips operate, and how much block and credit they are worth. Due to legalities or incompatibility with other preferences you have listed in your bid, the trips you bid for may not work. Imagine a senior MSP 900 captain biding very strongly for weekends off, by only listing specific trips he wanted. The only problem was that the trips he wanted operated, this month, on Saturdays. If this pilot did not know the desired pairings operated on the weekends this month, this very senior pilot could possibly work on weekends, even though weekends off was truly his first priority.

• You did not construct a bid with a built-in "backup plan"

Result: None of your bid options are satisfied in your award due to seniority and/or global constraints.

Everybody *should* have their "perfect" schedule in mind when entering their preferences into their bid. But the creation of your bid should not end there. You need to ensure that your bid includes preferences you wish to have satisfied if your "perfect" schedule preferences are not satisfied.

This is where bid weighting comes into play. Assigning well-thought-out weights to your preferences will allow PBS alternatives to your perfect schedule. Keep in mind that nobody has a 100% chance of getting absolutely everything they want in PBS – simply because even the most senior pilots' schedules need to be constructed under global constraints.

7.2 Tips and Strategies

7.2.1 Commuters

To commuter pilots, report and release times are generally most important, and reports are more important than releases. Commuters should bid "Avoid Work Periods." This bid means that you <u>want</u> trips back-to-back (placing multiple trips within a single work period). If you are bidding for short trips, and are senior enough to hold them, this will put short trips back-to-back. If you are bidding for, or can only hold, longer trips, they will NOT go back-to-back, due to 29/7 and 1 day off in 7 limitations. A trip that is not back-to-back with another is considered a separate work period.

If you use the Avoid Work Periods bid, you need to think about the importance of minimizing the number of commutes versus the importance of your report/release times. The higher the weight of the Avoid Work period bid, the more the Solver drives to minimize the number of commutes. The higher the weight of the Work

period Check-in/Release option, the more the Solver drives to award commutable trips, even if it means having more commutes.

Commuters need to decide if getting an additional day off is worth possibly getting a non-commutable trip. Don't weight your Avoid Days worked greater than nn days so high that it could outscore your report/release time requests.

7.2.2 Non-commuters

If you do NOT want trips back-to-back, you need to bid the Home Rest Times greater than 24:00 or 48:00 (depending if you allowed single day off or not) hours will prevent trips from going back-to-back. If avoiding back-to-back trips is not important to you, don't worry about it. You may receive more days off in a row elsewhere.

The Consecutive Days Off Less than nn days attempts to prevent "short" breaks between trips. It does NOT prevent back-to-back trips. It comes into play when there are days off between trips. Hence, if there are no days off between trips, the bid is not relevant. Use the Avoid Home Base Crew Rest less than hh:mm to avoid back-to-back flying. If you are bidding for, or are getting, long trips, remember that long trips productive don't go back-to-back, due to FAR and contract limitations.

7.2.3 "Icing on the Cake Bids"

Options like Avoid legs/duty greater than nn, Avoid layover in LSE greater than hh:mm, can be considered icing on the cake for most pilots. **Don't weight "icing on the cake" options so heavily that it affects your most important priorities: when you work, where trips sit on your line, etc.**

7.2.4 Bid for what you want, but also bid for what you need

One of the strengths of PBS is that you can always bid for everything you want. But smart bidders ALWAYS have a "complete" bid in case they cannot hold their most important preference.

Here is a sample bid that asks for the weekends off. If you can't hold the entire weekend off, it asks for Saturday afternoons off. If you can't hold Saturday afternoons off, asks for Sunday mornings off.

- 1000 points desire weekends Off
- 900 points avoid work on Saturdays after 1200
- 800 points avoid work on Sundays before 1200

Remember, for PBS, you must hold the entire day off (00:01 to 24:00) to have the day off awarded. Therefore to have the weekend off you must have Saturday

00:01 till Sunday 24:00 off to have the weekend awarded off. If you hold the weekend off (the entire weekend), your line score will be increased by 1000 points, because all three bid preferences have been honored. THIS IS A VERY HIGH SCORE.

If you cannot hold the entire weekend off, you don't get the 1000 points. The Solver will then attempt to avoid giving duty between 12:00 PM Saturday and 12:00 PM Sunday. Every hour of duty on Saturday after noon will add a -900 points and every hour on Sunday after noon will add -800 points.

7.2.5 Bid Weighting and "Trade-Offs"

Remember that the Solver considers ALL of your bid requests *simultaneously*. AD OPT's system is not a "sequential" system. All bid options that apply to a trip will contribute their respective scores and the total effect will be the total score of all of those options. To avoid unintended consequences, you must take this accumulation into account when you weight your other preferences! All bidders need to decide what trade-offs they will make (days off, report/release times, etc.) to hold all or part of their special day request.

Example:

1000 points Desire Dec 25 Off

This bid will try to get all of Dec 25 off, from 00:01 to 24:00 off. If you are not sure you can hold Christmas off, you can use the Partial Date Off Bid.

1000 points Avoid work on 12/25 after 12:00 900 points Avoid work on 12/25 before 12:00 800 points Avoid work on 12/25 between 09:00 and 15:00.

These options are requesting specific blocks of hours off on a certain date before after and between certain times. The score applies once for the entire hour period specified.

If it is not possible to get the entire date off then it will try to get the afternoon off from 12:00 till 24:00 off.

If the afternoon is not awarded off then the second choice is the morning. From 00:01-12:00.

The third choice in priority would be the middle of the day. At least you may get to have Christmas lunch with the family!

Notice that if the entire day of Dec 25 is free from duty the line scores 2700 points, as it met all three requests.

Keep in mind that other requests may be sacrificed in order to get these hours off if the point value is too high relative to the other requests!

The main point is to give the Solver alternatives if it cannot meet your most important requests.

7.2.6 Groups of days

If you need groups of days around a special day, remember the Period and String bids. The Period bid is for groups of days off as a block (all or nothing). The String bid is for "the more days off in a row, the better."

7.2.7 Use the Bid Analyzer

The Analyzer is a powerful tool for determining what trips work over a particular date, and when trips report or release on that date. When there are more trips on a particular date, the likelihood of receiving that date off goes down.

7.2.8 Pairing Duration and Desire vs. Avoid

One fundamental concept that all pilots need to understand is the relationship between pairing duration and Desire vs. Avoid. The Solver always attempts to maximize your satisfaction (Desire) or minimize your unhappiness (Avoid).

Let's assume that there are many trips of all durations when it is your turn to have the Solver build your line.

If you bid 50pts Desire Pairing Length in days equal to 3

A three-day trip would score 50 points. All other trips would be Neutral, and would score 0 points. The Solver will attempt to award you as many three-day trips as can fit on your line. If your line cannot be completed solely with three-day trips, the Solver will assign trips of one, two, or four-day lengths as needed.

If you bid 50pts Avoid Pairing Length in days equal to 3

A three-day trip would score -50 points. All other trips would be Neutral, and would score 0 points. The Solver will attempt to award you a line with no three-day trips, as each three-day trips penalizes the line score by 50 points. It will assign trips of one, two, or four-day lengths as needed to build your line.

If you bid 50pts Desire Pairing Length in days greater than 1

A one-day trip would score 0 points, as the bid identifies trips LONGER than (not equal to) one day. Two-day, three-day, and four-day trips would all score 50 points each. While the trip score is equal for all of these trips, the Solver will prefer to award the shortest trips (ie 2-day trips) since it can put more of those on your line, thus increasing the total line score, and maximizing your satisfaction.

If you bid 50pts Avoid Pairing Length in days greater than 1

A one-day trip would score 0 points, as the bid identifies trips LONGER than (not equal to) one day.Two-day, three-day, and four-day trips would each score -50 points. If one day trips are not available, the Solver will attempt to award you a line built of four-day trips. This is because your line can be built with 4 four-day trips, as compared to 8 two-day trips. Since any trip longer than one day inflicts a penalty, a line built with 4 four-day trips has fewer penalty points than does a line built with 8 two-day trips, or 10 one-day trips.

If you bid 50pts Avoid Pairing Length in days less than 4

A four-day trip would score 0 points, as the bid identifies trips SHORTER than (not equal to) four days. One-day, two-day and three-day trips would all score -50 points each. The Solver will attempt to build you a line of four-day trips which would all score zero. If it must use a shorter trip it could use any one of the other types since they all score -50. If more short trips are needed, it will use the combination that will use the least number of trips. Most likely that would mean three-day trips would be used before two-day, and two-day trips before one-day since fewer of the medium length trips would be needed as opposed to one-day trips. The fewest number of trips less than four-days long will give the least negative score.

7.3 Bidding Checklist

Similar to what we do in the flight deck, the ALPA PBS Committee feels that using a checklist will help to ensure a successful bidding experience for pilots. Each time you finish constructing a PBS bid, review what you have entered with the checklist:

- 1) Did you bid for when you want to AVOID work?
 - a. Check-in/Check-out times
 - b. Specific days off
 - c. Specific dates off
- 2) Did you bid for where/how you want trips to sit on your line? (i.e do you want trips back-to-back, or days off between for a certain number of days)
 - a. Home base crew rest
 - b. Weekends Off
 - c. String/Period of Days/Dates Off.
- 3) Did you bid for how much flying you want?
 - a. Days Off
 - b. Credit Hours
 - c. Productivity
- 4) Did you enter bids in Regular and Reserve Scope? If there is a chance you could end up with a reserve line, duplicate your preferences in each scope.
- 5) Did you check your bid weights?
- 6) Did you use the bid analyzer?
- 7) Are you following the cardinal rule? "Avoid" work "Desire" days off?
- 8) Are you bidding to commute?
 - a. Work Periods
 - b. Work period check-in/check-out
- 9) Did you enter a bid to Desire/Avoid CDO's? (pairing class)
- 10) Did you enter a bid to Desire/Avoid Deadheads?
- 11) Review the "Calendar View" Tab:
 - a. Did you remember to bid around Planned Activities (vacation, leaves of absence, training)?
 - b. Did you bid around any carry-in trips from the last month?

- 12) Review the "Other Options" Tab:
 - a. Allow Single Day Off? Check ONLY if you want the Solver to consider it to increase your bid satisfaction.
 - Maximum Line Range? Check ONLY if you want more flying than the "Average Line Credit" published in the Monthly Bid Package – AND – make sure you have another productivity bid (bid for credit)
- 13) Review the "CDO Line" Tab:
 - a. If you want a CDO line, make sure to enter bids in this tab
 - b. Check "Desire ANY CDO Line" <u>only if</u> you don't care what CDO line you end up with.
 - c. If you DO NOT WANT A CDO LINE make sure <u>NOTHING</u> is entered in this tab!
- 14) Review the "Reserve Line Type" Tab if you know you there is a chance you will be awarded a reserve line.
- 15) Did you bid for Short Term Training? Make sure to review/refine your bid based upon what training slot you were awarded.
- 16) If you bid for CDO lines also use Regular and/or Reserve bids if you do not hold the CDO line you bid for.
- 17) If you are on the cusp of Regular/Reserve line holder status, bid using preferences from each Bid Scope just in-case you do not get the Regular line you had hoped for!
- 18) Did you use a "Conditional Bid"? Make SURE to enter bids in RESERVE Bid Scope!

DON'T FORGET TO SAVE YOUR BID!