Project Identification:
FSA New Features

Metron Aviation, Inc.
45300 Catalina Court, Suite 101
Dulles, VA 20166

This page is intentionally left blank.

Table of Contents

Acronym List

Acronym	Term
ACID	Aircraft Identification
AFP	Airspace Flow Program
DAS	Delay Assignment
GAAP	General Aviation Airport Program
GDP	Ground Delay Program
UDP	Unified Delay Program

Introduction

This document discusses all new features implemented for Real Time Flight Schedule Analyzer (RT-FSA). The home page of RT-FSA is illustrated in Figure 1, where all AFP/GDP programs and Ground Stops are listed. The front page includes whether the program has had adaptive compression and if it's a current or cancelled event.
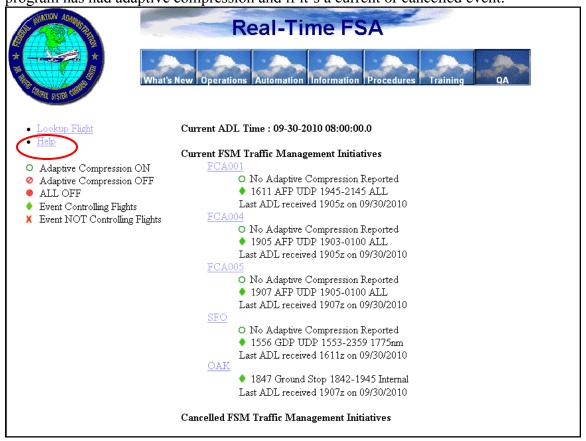

Figure 1: Real-Time Flight Schedule Analyzer

The FSA 9_0 User's Guide is available as a complete reference for RT-FSA functions not included in this document. Select **Help** from the left side of the home page to open RT_FSA 9_0 online help in your browser. You also can access the online help from any RT-FSA component.

Performance Report Updates

The Performance Report displays performance statistics by hour and is accessed by clicking the link of a program on the home screen. It aids in understanding why a program over or under performed.

Pop-up Demand - Unassigned Report

In the Performance Report, under cancellations, there is now a **Pop -Up Demand - Unassigned** row in Figure 2. This new row includes the total number of pop-up flights, those that are not known when a program is issued, that are assigned to unassigned slots for a UDP or a GAAP program by hour. Clicking on a non-zero value in the Performance Report will produce the **Pop -Up Demand - Unassigned Report** below it. Values will turn red once they have been selected.

FCABA2 Performance
Flight List Generated at 1818z on 09/21/2010
Original Start Time: 14:54z

Hour	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
FSM Program Rate	30	30	30	30	30	30	30	30	30	30
Number of Assigned Slots	0	8	6	13	10	10	9	19	15	2
Flights Controlled by Another Initiative	1	21	27	26	23	10	6	4	1	0
Cancellations	-0	-0	-2	-3	-0	-2	-0	-0	-1	-0
Pop-Up Demand - Unassigned	0	1	5	13	10	10	9	19	11	1
Pop-Up Demand - DAS	1	0	1	0	0	0	0	0	0	0
Extra Demand	10	95	78	34	47	25	9	7	5	2
Flights Arriving Prior to Their Control Hour	-0	-1	-5	-13	-10	-10	-9	-19	-11	-1
Flights Arriving After Their Control Hour	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
Total Current Demand	11	123	104	57	70	33	15	11	9	3
Number of Unassigned Slots	0	0	0	0	1	3	5	0	13	22
Total Potential Demand	11	123	104	57	71	36	20	11	22	25
Drop Outs	0	0	0	0	0	0	0	0	2	0

Figure 2: Performance Report

The new **Pop -Up Demand - Unassigned Report** in Figure 3 displays lead time (how far in advance the flight became known), unassigned slot delay, total delay, and unassigned slot delay for each popup flight for that particular hour. The lead time is expressed in HH:mm. The report also displays the total delay and average delay for all the pop-up flights that were assigned to unassigned slots under a particular UDP or GAAP program.
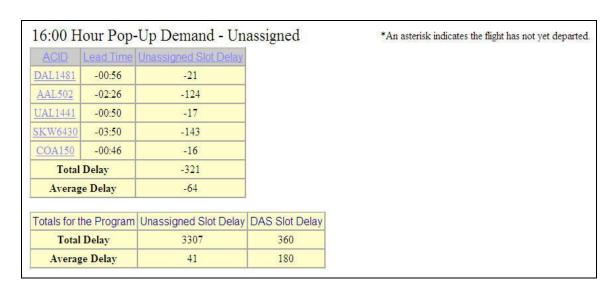
Figure 3: Pop-Up Demand - Unassigned Report

Pop-Up Demand – DAS

In addition, the Performance Report has added a new row, below **Pop–Up Demand – Unassigned** titled **Pop–Up Demand – DAS** in Figure 4. This row shows the total number of pop-up flights that are assigned to DAS type slots for an UDP or a GAAP program by hour.

Figure 4: Pop-Up Demand Unassigned Column

Selecting a non-zero number in the **Pop–Up Demand – DAS** row will cause the

corresponding report to appear under the Performance Report. The **Pop-Up Demand DAS Report** in Figure 5 lists all flights for a particular hour with its corresponding lead time and DAS Slot Delay. The lead time is expressed in HH:mm. In addition, it sums and averages delay for all flights for this hour. The report also includes total and average for Unassigned Slot Delay and DAS Slot Delay for the entire UDP or GAAP program.
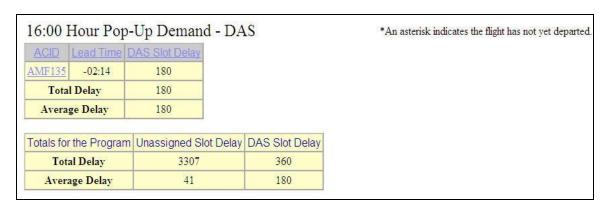

Figure 5: Pop-Up Demand – DAS Report

Updated Adaptive Compression Report

The **Adaptive Compression Report** in Figure 6 separates Compressed Flights and Bridged Flights. This report is available for both airport and airspace data sets. The **Adaptive Compression Report** is available once an airport or airspace Performance Report has been opened for a GDP or AFP. The link is available on the left side of the page.
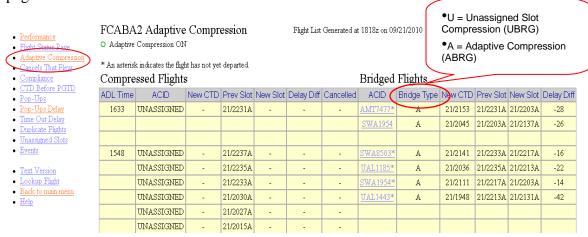

Figure 6: Adaptive Compression Report

Newly added to Adaptive Compression Report, unassigned flights for a UDP and/or a GAAP are now included. For unassigned flights, the ACID will appear as "UNASSIGNED", and only the Prev Slot column will be populated under the Compressed Flights side. In Figure 6, an additional new column is included called

Bridge Type and it is under Bridged Flights. The valid values are U for Unassigned Slot Compression (UBRG) and A for Adaptive Slot Compression (ABRG).

Pop-Up Delay Report

After selecting a program, the Pop-up Delay Report in Figure 7 can be accessed by selecting the **Pop-Ups Delay** link below the Pop-Ups link on the left side of the page.
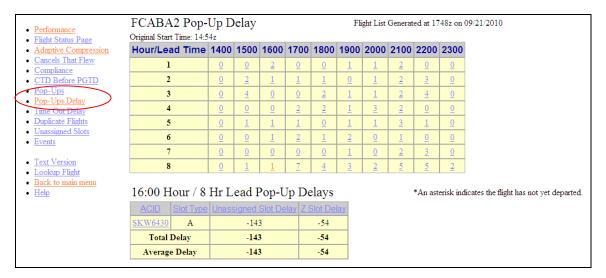

Figure 7: Pop-Up Delay Report

Selecting on a non-zero Hour/Lead Time value in the **Pop-Ups Delay Report** will allow a user to examine the unassigned delay for flights in a program (GDP/AFP) at a certain lead time (how far in advance the flight has become known). The new window is displayed under the Pop-Up Delay Report and includes ACID, slot type, unassigned slot delay, and Z slot delay. Z slot delay is the difference between the original airport parking gate arrival time and the arrival slot time given to a controlled flight. It also includes the total and average delay for Unassigned Slot Delay and Z Slot Delay for the specific Hour and lead time hour.