AUTOMATED TRAFFIC COUNT AND CALCULATING PROGRAM(S)

ISSUE

The Parties recognize the need to develop, validate, and deploy a program(s) that accurately counts, classifies, provides modeling capabilities, records operations in the National Airspace System (NAS), and calculates Traffic Count Indices (TCIs). The program will need to accommodate existing NAS data sets and future enhancements. En Route Track Analysis Program (ETAP) relies on Host Aircraft Management Execs (HAME) data to count and calculate TCI's. HAME data is no longer available. En Route automation platforms utilize new data sets that are not compatible with the HAME format. There is no current program to count traffic in Combined Control Facility (CCFs). New data sources are also available for terminal facilities. Additionally, tools that calculate TCIs will need to be modified and/or developed.

THE SCOPE

In accordance with Article 114 of the Parties' Collective Bargaining Agreement (CBA), the workgroup will oversee and participate in the development and validation of an automated traffic counting and calculating program(s), as defined in the Issue paragraph above, that will, at a minimum, incorporate the Complexity Formula factors identified in Appendix A of the CBA and, if feasible, the recommended changes identified in Appendix 1 of this document. Once validated, the workgroup will individually and cumulatively model the recommended changes to the complexity formula identified in Appendix 1 of this document and calculate the facility TCIs with and without the recommended changes individually and cumulatively.

The workgroup will also identify: (1) any recommendation(s) that cannot be modeled due to programming and/or data source limitations; (2) any additional programmatic/manual counting requirements and/or data systems needed to accurately model the recommendations; and (3) any recommendation(s) necessary to provide consistent application of the Complexity Formula factors for both automated and non-automated facilities.

This workgroup shall consist of at least four (4) members from each Party. Each Party will designate one (1) member of the workgroup as a co-lead. All travel related expenses for workgroup meetings will be paid by the Agency.

OUTCOME

The workgroup will advise the Parties at the national level that the automated traffic counting and calculating program(s) has been validated.

The workgroup will also present to the Parties at the national level:

(1) any recommendation(s) that cannot be modeled due to programming and/or data source limitations;

(2) any additional programmatic/manual counting requirements and/or data systems needed to accurately model the recommendations;

(3) any recommendation(s) necessary to provide consistent application of the Complexity Formula factors for both automated and non-automated facilities; and

(4) the results of the modeling, including comparison calculation of the facility TCIs with and without the recommended changes individually and cumulatively.

The workgroup will complete its tasks no later than twelve (12) months from the effective date of the CBA. The workgroup will provide updates to the Parties at the national level every thirty (30) days.

LEADERSHIP COMMITMENT

The undersigned Joint Sponsors authorize this workgroup to operate within the guidelines described in the SCOPE above.

NATCA Joint Sponsor

FAA Joint Sponsor

7/14/16

Date Signed

1	***(TERMINAL)*** Change the glossary definition of Point-out to the following: a physical or automated action taken by a controller to transfer the radar identification of an aircraft to another controller if the aircraft entered the airspace or protected airspace of another controller and radio communications were not transferred.
2	***(TERMINAL)*** Delete the 0.5% add-on for ASOS
3	***(TERMINAL)*** Increase the weight for LAWRS add-on from 1% to 2% to more adequately reflect this complexity.
4	***(TERMINAL)*** Proposed Formula Change For Facilities where at least 97% of the traffic count is derived by automated means, for each day, and the prior 364 days (i.e. use a 365 day count) calculate: 1. For regularly occurring operations, those happening at least 160 times a year, the percent of airport air traffic (Arrivals and Departures) rounded up to the next highest whole percentage that is: a. Super Heavy b. Heavy c. B757 d. Large e. Small 2. Multiply the percentage of Super Heavy traffic by 4 then multiply by the average weighted hourly count derived in (G). 3. Multiply the percentage of Heavy traffic by 2 then divide by four. Then multiply by the average weighted hourly count derived in (G). 4. Multiply the percentage of B757 traffic by 1.6 then divide by four. Then multiply by the average weighted hourly count derived in (G). 5. Small traffic: a. If the total percent of Small traffic is less than the total percent of large traffic, multiply the percentage of Small traffic from (E) above by 1.6 then divide by four. Then multiply by the average weighted hourly count derived in (G). b. If the total percent of Small traffic is greater than the total percent of Large traffic: . 1) Calculate the percentage of Small traffic that has a Same Runway Separation category of I (One) or is a Helicopter; . 2) Calculate the percentage of Small traffic that has a Same Runway Separation category of II (Two); . 3) Calculate the percentage of Small traffic that has a Same Runway Separation category of III (Three) or has no Same Runway Separation category assigned. Determine which two Categories (CAT I and II, or CAT II and III) constitute a lower percentage of the total air traffic. Multiply this percentage by 1.3 then divide by four. Then multiply by the average weighted hourly count derived in (G). 6. Add 2 through 5. This will yield the traffic mix add-on count. Note: For facility's that don't have an automated count (e.g. GFK) the long-standing traffic mix formula currently in Appendix A would still need to be utilized. The long-standing provision should be maintained with a reference to its use only for facilities that do not have an automated traffic count.

5	***(TERMINAL)*** Add Special Use Airspace to the Approach Control complexity formula. Revise the Special Use Airspace definition to include Air Traffic Control Assigned Airspace (ATCAA), IFR Military Training Routes, and IFR Refueling Tracks. The recommended weighting of these operations for Approach Control's is 1.0. The recommended language is as follows: o Each IFR/SVFR arrival (including IFR cancellations) and IFR/SVFR aircraft terminating ATC services upon entry into Special Use Airspace is given a weight of 1.0 o Each IFR/SVFR departure (including IFR air files) and IFR/SVFR aircraft receiving ATC services upon leaving Special Use Airspace is given a weight of 1.0. o Special Use Airspace (SUA) – Airspace where activities must be confined or limitations may be imposed on aircraft operations. For the purpose of this standard, the SUA airspace types included are: Alert Area, Controlled Firing Area, Military Operations Area, Air Traffic Control Assigned Airspace (ATCAA), Prohibited Area, Restricted Area, IFR Military Training Routes, and IFR Refueling Tracks.
6	***(TERMINAL)*** Change the definition for Proximity Airports Each facility: If it has 150,000 or more annual itinerant operations and is within 10 miles of other airports with 150,000 or more annual itinerant operations = 2.5%. If it has 200,000 or more annual itinerant operations and is within 15 miles of other airports with 200,000 or more annual itinerant operations = 1.5%. If it has 300,000 or more annual itinerant operations and is within 20 miles of other airports with 300,000 or more annual itinerant operations = 0.75%. Where multiple values may apply, use the single highest applicable value. Change the glossary definition to the following: Proximity Airports - To be counted as a proximity airport, an airport must have at least 150,000 itinerant operations per year and must have one or more additional airports within 10 miles (center of airport to center of airport) that also have 150,000 itinerant operations or more per year, or an airport must have at least 200,000 itinerant operations per year and must have one or more additional airports within 15 miles (center of airport to center of airport) that also have 200,000 itinerant operations or more per year, or an airport must have at least 300,000 itinerant operations per year and must have one or more additional airports within 20 miles (center of airport to center of airport) that also have 300,000 itinerant operations or more per year .
7	***(TERMINAL)*** Add a Ground Operations Complexity factor Prerequisite: Towers with Itinerant Airport Operations of 250,000 or more per year, 2,000 acres or less Runway Contained Surface Area and with regularly scheduled Group V and/or VI commercial operations. 3. Divide Yearly Total Operations by Runway Contained Surface Area. 4. Divide the resulting number in item 1 above by 10. The resulting figure is the ground complexity add-on. Example: 6. Airport ABC has 570,000 operations per year and 1,573 square acres for the Runway Contained Surface Area. The resulting number is 362.4. 7. Divide 362.4 by 10 and the add-on is 36.24. Runway Contained Surface Area – The total number of acres within a polygon created using runway ends as the vertices. Only those runway end points that encompass the land mass containing all runways are used to create this polygon.

8	***(TERMINAL)*** Create a complexity factor that applies one count for each 30-minute segment after an aircraft enters a facility's airspace without exiting or receiving any other counts. If an arrival segment occurs at 31 minutes after departure, then the operation would receive a departure, an extended flight mission, and an arrival count. This factor would apply to both the Tower and Approach Control categories. Helicopters operating in their own designated helicopter areas will also be allowed time-in-airspace credit. Only non-radar facilities should be allowed to manually augment this operation. To implement this factor, the following count elements for Tower and Approach Control facilities would be changed to: Each IFR/SVFR overflight and extended flight mission count is given a weight of 1.25. Each VFR overflight and extended flight mission count is given a weight of 1.00. And in the Glossary, the following definition would be added: Extended Flight Mission - A flight delaying for more than 30 consecutive minutes in a facility's airspace. Additional counts are authorized after each 30 minutes that passes as long as the aircraft does not receive any other traffic count.
9	***(TERMINAL)*** In the Tower complexity formula, change the altitude qualification to 2,000 feet and include obstacles that meet or exceed this requirement within the Tower's airspace. This will also require a change to the glossary definition. The changes will be as follows: Each facility: If it has mountainous terrain or obstacles within its airspace that are 2,000 feet or greater above its primary airport field elevation = 5%. Change the Appendix A Glossary definition of terrain to: Terrain/Obstacles "A Tower is credited with having mountainous terrain/obstacles if land or obstacles measure 2,000 feet or greater above the primary airport field elevation and is contained in the Tower's airspace." "An Approach Control is credited with having mountainous terrain if land measures 4,000 feet or greater above the primary airport field elevation and is contained in the Approach Control's airspace." Note: There is no change to the requirement for an Approach Control to receive the terrain element.
10	***(EN ROUTE)*** Increase the weight of each VFR advisory to 1.00
11	***(EN ROUTE)*** Change the glossary definition of Special Use Airspace to: Special Use Airspace (SUA) – Airspace where activities must be confined or limitations may be imposed on aircraft operations. For the purpose of this standard, the SUA airspace types included are: Alert Area, Controlled Firing Area, Military Operations Area, Air Traffic Control Assigned Airspace (ATCAA), Prohibited Area, Restricted Area, IFR Military Training Routes, and IFR Refueling Tracks.
12	***(EN ROUTE)*** Change the Airspace Density formula to: For each day and the prior 364 days (i.e., use a 365 day count): 1. Divide the Center Airspace Mileage by X square miles.

	2. Calculate the density add-on (average weighted hourly count (H) /density (1. above) x Y). Remove Center Area from the glossary. Change Center Airspace Mileage definition to: Center Airspace Mileage - A center facility's cubic mileage from the top of each square mileage segment of MIA or ceiling of approach control airspace (whichever is higher) up to and including FL410 within a center facility's lateral boundaries minus any unusable airspace. Add Unusable Airspace definition to the glossary: Unusable Airspace - The average cubic mileage of the total of a center facility's active Restricted Area, Warning Area, Prohibited Area, ATCAA, and MOA airspace during the busiest 1,830 hours annually.