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DATA LINK AIRLINE BENEFITS STUDY

NATIONAL SECTOR SURVEY

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NATIONAL SECTOR SURVEY

This portion of the Data Link airline benefits study was comprised through interviews with Traffic Management Unit (TMU) managers or representatives from 19 Air Route Traffic Control Centers (ARTCC) across the nation. The three enroute facilities that were not interviewed in this portion of the study are Anchorage ARTCC, Honolulu ARTCC, and Los Angeles ARTCC.

The interview began by explaining to the TMU managers the types of sectors on which we were searching for information. The target sectors needed to experience volume saturation and frequency congestion on a regular basis and require assistance (i.e., miles-in-trail (MIT) restrictions, aircraft reroutes around the sector, trackers, hand-off personnel, coordinators, or other measures) to continue to transition traffic in a safe and orderly manner. The following questions were asked during the interview and correspond with the answers given for each target sector in the report.

SECTOR IDENTIFICATION: What is the sector number, sector identifier, altitude limits, and area within the center where the sector is located?

TRAFFIC TYPES: What are the specific types of traffic that transition through the sector?

SECTOR WORKLOAD and REROUTES: How busy is the sector and what type of saturation level does it experience? What control techniques are employed by the controllers to transition the aircraft? Are trackers or coordinators used regularly? If trackers or coordinators are used, how many times per day? Do controllers ever hold aircraft because of sector saturation? Does TMU ever reroute aircraft around the sector to reduce saturation?

TMU RESTRICTIONS: If MIT restrictions are implemented to reduce saturation or frequency congestion in the sector, what facilities are being affected by the flow and what is the specific flow restriction?

PROBLEM CURRENCY: Does the problem still exist, and have any steps been taken to address the problem?

COST TO USERS: Do you have any idea of the direct cost incurred by the air carriers because of the restrictions issued to relieve saturation levels in the specific sectors?

FACILITY: Miami ARTCC

CONTACT: Bert Barnett, TMU Supervisor, (305) 716Ä1540

SECTOR IDENTIFICATION: Sector 46, Aluto, Surface to Flight Level (FL) 230, Area 3.

TRAFFIC TYPES: The Aluto sector is a narrow sector with little sequencing or maneuvering room. There are three major south Florida airports feeding into the sector: Miami International (MIA), Fort Lauderdale/Hollywood International (FLL), and Palm Beach International (PBI). This sector works all domestic departures from south Florida that file to the north or northeast airports. The sector must sequence the departures and hand the traffic off to the high altitude sector if filed FL240 or above, or the adjoining low altitude sector if filed FL230 or below. All other over-flight traffic has been removed from this sector due to the amount of departures.

SECTOR WORKLOAD AND REROUTES: The Aluto sector experiences very heavy saturation and voice congestion during the peak departure pushes. The controller will use speed control and vectoring techniques to create in-trail spacing for the high altitude sector. Trackers are very common during the departure rushes.

TMU RESTRICTIONS: There is a daily flow restriction into this sector that occurs at 1730z to 1900z and again at 2100z to 2200z. The restriction is usually 10 MIT on the MIA jet departures, and 20 MIT on both the FLL and the PBI jet departures. While these restrictions cause delays at all three of these airports, the greatest impact is to aircraft waiting to depart MIA. Miami tower has no side-step or waiting areas along the taxiways. The amount of delay is dependent on the runway configuration at MIA, but is usually limited to less than 15 minutes, and therefore not reported.

PROBLEM CURRENCY: The problem currently exists despite recent airspace changes that moved traffic out of this sector.

COST TO USERS: No determination of cost to system users.

FACILITY: Miami ARTCC

CONTACT: Bert Barnett, TMU Supervisor, (305) 716-1540

SECTOR IDENTIFICATION: Sector 2, Hobee High, FL240 and Above, Area 2

TRAFFIC TYPES: The problem experienced by this sector is the large volume of aircraft from the northeast airports which are destined for MIA, FLL, and PBI airports. The sector experiences peak volume periods because it is an offshore sector (this benefits the aircraft to file offshore if they are over-water equipped because it is a more direct routing from the northeast airports) which works the bulk of the arrival traffic entering Miami center. This sector has to sequence the arrivals for the low altitude sector and is also responsible for sequencing any Orlando International Airport (MCO) jet departures to MIA or FLL airports. The sequencing of the MCO jet departures (which usually stay in the low altitude structure) is accomplished by the low altitude controller putting a data block on sector 2's scope and the R2 controller insuring that there will be a gap for the sequencing.

SECTOR WORKLOAD AND REROUTES: The volume and complexity of this arrival push lasts for about three hours with peak traffic periods lasting about one and one-half hours. During the peak periods, trackers are needed and frequency congestion is a problem. Additionally, if the sector is experiencing heavier than normal volume, TMU will reroute any MCO aircraft which have filed to FLL or MIA airports out to the west coast of Florida. This reduces the complexity on the Hobee sector but adds additional flight time and expenses on the aircraft involved. Miami approach will put a MIT restriction at the arrival fixes on the MIA and FLL jet aircraft during heavy volume periods.

TMU RESTRICTIONS: There are daily flow restrictions placed by Miami Center on Jacksonville Center:

1300z to 1600z - 10 MIT on J79 for arrival aircraft to MIA and FLL.

1300z to 1600z - 15 MIT for Atlantic route arrival aircraft to MIA and FLL.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Miami ARTCC

CONTACT: Bert Barnett, TMU Supervisor, (305) 716-1540

SECTOR IDENTIFICATION: Sector 67, LAL High, 10,000 feet to FL230, Area 3

TRAFFIC TYPES: This sector has no real defined traffic flow. The sector works arrivals, departures, and crossing over-flight traffic. All of the traffic flows in this sector at one time or another cross each other, making this one of the most complex sectors in Miami ARTCC. The sector works Tampa International Airport (TPA) southeast bound departures, MCO southwest bound departures, Fort Myers (FMY) north bound departures, TPA terminal arrivals, and a limited number of FMY arrivals from the Northeast.

SECTOR WORKLOAD AND REROUTES: This sector is a transitional sector that uses heavy vectoring to sequence the arrivals, and also works departures and over flights. The sector does experience frequency congestion during busy volume periods. Trackers and coordinators are common at this sector during the busy periods.

TMU RESTRICTIONS: There are usually three daily flow restrictions placed on the FMY and MCO jet departures:

1300z to 1400z -- 15 MIT

1730z to 1900z -- 15 MIT

2100z to 2200z --15 MIT

There would most likely be ground delays at the affected airports (more likely FMY), but we are unable to determine the lengths of these delays.

PROBLEM CURRENCY: The problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Jacksonville ARTCC

CONTACT: Dick Gillick, TMU Supervisor, (904) 549-1543

SECTOR IDENTIFICATION: Sector 15, OCALA Low Sector, 110 feet to FL260, (Central Area.

TRAFFIC TYPES: The Ocala sector controls the TPA arrivals on the DADES Standard Terminal Arrival Routing (STAR), the main arrival stream into the TPA terminal area. MCO arrivals on the LEESE STAR, a very busy arrival fix, are also under Ocala's control. This sector works the MCO departures through the CAMAN Departure Transition Area (DTA), and has many crossing traffic situations which increase the sector's complexity.

SECTOR WORKLOAD AND REROUTES: The Ocala sector is one of the busiest sectors in Jacksonville center. The sector has many areas where descending and climbing aircraft have to cross paths, adding tremendously to the sector complexity. Trackers and/or coordinators are used at least once a day and often more than once a day to relieve sector saturation and frequency congestion.

TMU RESTRICTIONS: The sector experiences peak traffic pushes on the MCO and TPA arrivals from approximately 1500z to 1700z, and then again in the evening at an undetermined time. Flow control is not regularly used at this sector.

PROBLEM CURRENCY: The problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Jacksonville ARTCC

CONTACT: Dick Gillick, TMU Supervisor, (904) 549-1543

SECTOR IDENTIFICATION: Sector 17, Perry, FL240 to FL310, Central Area.

TRAFFIC TYPES: The Perry sector is a high altitude sector which works aircraft which are usually climbing to altitude, or needing to be sequenced and descended for the arrival sector. The sector works TPA departures, MCO departures, and the TPA and MCO arrivals which are assigned the DADES and LEESE STARS. Additionally, the sector works the FLL, MIA, and FMY terminal arrivals and departures which are already at level flight transitioning throughout the sector. The sector is a relatively large sector that could accommodate more aircraft if not for the congestion problems.

SECTOR WORKLOAD AND REROUTES: The Perry sector experiences very heavy volume, sector saturation, and frequency congestion problems several times each day. Trackers and/or coordinators are used at this sector a few times each day and several times each week. Flow restrictions are used for a short period of time each day to help alleviate the sector congestion. Aircraft are at times routed around the sector to alleviate saturation.

TMU RESTRICTIONS: TMU issues a flow restriction for aircraft entering the Perry sector during the arrival and departure pushes associated with TPA and MCO airports.

PROBLEM CURRENCY: The problem currently exists.

COST TO USERS: No determination of costs to system users.

FACILITY: Memphis ARTCC

CONTACT: Frank Bartozzi, TMU Manager (901) 368-8250

Memphis ARTCC has no sectors that fit our criteria.

FACILITY: Washington ARTCC

CONTACT: Ron Harrity, TMU Manager, (703) 771-3440

SECTOR IDENTIFICATION: Sector 34, Norfolk High, Area E.

TRAFFIC TYPES: The Norfolk High sector is a sector with very heavy traffic congestion and voice congestion problems throughout the day. The sector works departures from the New England and the New York and Washington DC terminal areas which file to the south or southeast airports. The sector also works arrivals from the south and southwest to the John F. Kennedy International (JFK) Airport. The sector is narrow with warning areas on the east side, and the Patuxtent restricted areas on the west side. Almost all of the traffic flowing through the sector is departures or arrivals.

SECTOR WORKLOAD AND REROUTES: The sector experiences very heavy traffic flow approximately two times per day and maintains moderate to heavy traffic throughout the day. During the two very heavy traffic periods, trackers and coordinators are used, and flow restrictions are implemented. Additionally, during these time periods, the JFK arrivals are rerouted around the sector to another arrival fix to eliminate any head-on conflictions with the departures.

TMU RESTRICTIONS: TMU issues flow restrictions during the two heavy traffic flow periods as follows:

10 to 15 MIT on all Boston Logan jet departures.

10 to 20 MIT on all New York terminal departures.

10 to 20 MIT on all Philadelphia departures.

20 MIT on all Washington metro departures.

When these flows are implemented, the New York terminal area departures back up on the runways, and the Washington Metro departures are put in a delay status. The Washington ARTCC TMU will reroute the Washington metro departures around the sector to reduce delays.

PROBLEM CURRENCY: This is a current problem. Washington Center has permanently rerouted the Raleigh Durham (RDU) terminal traffic around this sector in an attempt to alleviate some of the congestion.

COST TO USERS: No determination of cost to system users.

FACILITY: Washington ARTCC

CONTACT: Ron Harrity, TMU Manager, (703) 771-Ä3440

SECTOR IDENTIFICATION: Sector 37, Marlington, Area A

TRAFFIC TYPES: This sector's main volume of aircraft is the Washington Metro arrivals and the Pittsburgh terminal arrivals. The sector also works Richmond (RIC) arrivals, Norfolk (ORF) arrivals, Washington Metro terminal westbound departures, and Pittsburgh terminal area departures.

SECTOR WORKLOAD AND REROUTES: This sector is a transitional sector that uses heavy vectoring to sequence arrivals but also works departures and over-flights. The sector does experience some frequency congestion during heavy volume times. The sector maintains a moderate to heavy workload throughout the day with periods of very heavy congestion. During the very heavy traffic periods, the Pittsburgh terminal arrivals are rerouted around the sector to reduce congestion.

TMU RESTRICTIONS: TMU puts out flow restrictions once daily from 1400z to 1600z then on an as needed basis.

> 1400z - 1600z -- 20 MIT on all Pittsburgh and Washington Metro arrivals from Indianapolis ARTCC.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Boston ARTCC

CONTACT: Jack Basius, TMU Manager, (603) 886-7678

SECTOR IDENTIFICATION: Sector 36, Gardner, Surface to FL230, Area B

TRAFFIC TYPES: The Gardner sector in Boston ARTCC is a very busy sector that experiences saturation and voice congestion problems on a daily basis. The sector works turbojet and turboprop arrivals into Boston-Logan International Airport (BOS) and satellite airports. The sector also works arrivals into three minor airports not serviced by a control tower. The Gardner VORTAC, located in this sector, is the main navigational aid for the over-flights to New York terminal areas, and is also the inner metering fix into BOS.

SECTOR WORKLOAD AND REROUTES: The sector maintains moderate to heavy traffic throughout the day, with periods of very heavy congestion. Trackers are used extensively at this sector. During the very heavy traffic periods, TMU routes all over-flight traffic around the sector to alleviate congestion.

TMU RESTRICTIONS: TMU issues an internal flow restriction of 20 MIT Regardless of Altitude (RALT) entering the Gardner sector on an as needed basis. Boston approach control regularly issues a 10 to 15 MIT restriction on the arrivals at the inner fix. Holding is quite common in this sector when they are required to meter aircraft into BOS, with delays running from 15 minutes up to as long as 40 minutes.

PROBLEM CURRENCY: Problem currently exists.

COST TO USERS: No determination of costs to system users.

FACILITY: Boston ARTCC

CONTACT: Jack Basius, TMU Manager, (603) 886-7678

SECTOR IDENTIFICATION: Sector 20, Dansbury, 11,000 feet to FL270, Area E

TRAFFIC TYPES: Dansbury is a transitional sector that works all New York metro departure aircraft to the north and northeast as well as the departures assigned the North Atlantic routes. The sector works turboprop arrivals into Manchester (MHT), BOS, Worchester (ORH), Bradley (BDL), and Providence (PVD). The sector also works over-flights that must be spaced to create gaps for departures. Often, MIT restrictions are placed on the over-flights entering the sector so the departures can be blended into the traffic stream.

SECTOR WORKLOAD AND REROUTES: The sector uses heavy vectoring and speed control, and experiences times when a coordinator is needed to assist the radar controller.

TMU RESTRICTIONS: The Boston ARTCC TMU places a Minutes-In-Trail restriction on New York Terminal Radar Approach Control (TRACON) for the North Atlantic route aircraft on an as needed basis. Additionally, a 15 MIT restriction on BOS arrivals and over-flights is routinely placed on New York ARTCC for aircraft entering the Danbury sector.

PROBLEM CURRENCY: Problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Boston ARTCC

CONTACT: Jack Basius, TMU Manager, (603) 886-7678

SECTOR IDENTIFICATION: Sector 5, Stewart, 7,000 to 17,000 feet, Area E

TRAFFIC TYPES: The Stewart sector is a transitional sector who's main volume of traffic is the Newark (EWR) arrivals. The sector also handles all of the arrival and departure traffic in and out of Stewart International Airport (SWF). This sector is also affected by New York TRACON, which accepts no over-flight traffic below 17,000 feet. This traffic is often climbed above the TRACON airspace and worked as an overÄflight by the Stewart sector. These overÄflights, in conjunction with other over-flights which enter the sector, put a tremendous amount of workload on the controller who is attempting to sequence the EWR arrivals.

SECTOR WORKLOAD AND REROUTES: This sector uses very heavy vectoring, speed control, and holding of the Newark arrivals on a daily basis. The sector experiences sector congestion and frequency congestion. Coordinators/trackers along with flow restrictions are used regularly to help alleviate the saturation. During the very heavy sector saturation periods, all over-flight traffic is rerouted around the sector, adding at least an extra 50 miles to each affected flight.

TMU RESTRICTIONS: The Boston TMU issues a Departure Sequencing Program (DSP) as needed for aircraft that file to EWR. A DSP requires the towers to call for release on aircraft, and can result in lengthy delays to the user. The following airports routinely have DSP programs in effect for aircraft with a destination of EWR:

Syracuse (SYR)

Albany (ALB)

Burlington (BTV)

Portland (PWM)

Boston (BOS)

PROBLEM CURRENCY: Problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Boston ARTCC

CONTACT: Jack Basius, TMU Manager, (603) 886-7678

SECTOR IDENTIFICATION: Sector 38, Athens, FL240 and Above, Area B

TRAFFIC TYPES: The Athens sector is a transitional sector which works arrivals into BOS. The sector also works all of the overseas arrivals into EWR, and the New York Metro terminal departures assigned the North Atlantic routes. The sector works departures off ALB, PWM, BTV, and MHT. Numerous climbing or descending aircraft traverse this sector. Only a small portion of the traffic is at a level altitude.

SECTOR WORKLOAD AND REROUTES: This sector uses heavy vectoring techniques and coordinators when busy. Operational constraints do not allow traffic to be rerouted out of this sector.

TMU RESTRICTIONS: TMU issues a 20 MIT restriction on Cleveland ARTCC for all traffic entering the Athens sector as needed. Additionally, New York TRACON is often required to provide eight minutes in trail on the Atlantic Route departures to alleviate the sector saturation. This restriction results in delays for the New York departures.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Cleveland ARTCC

CONTACT: Jim Bartell, TMU representative, (216) 774-0428

SECTOR IDENTIFICATION: Sector 48, Revenna, FL240 to FL310, Area 4

TRAFFIC TYPES: The Revenna sector is a transitional sector and one of Cleveland ARTCC's busiest. The sector works arrivals to Detroit-Wayne Airport (DTW) and Pittsburgh International Airport (PIT). Additionally, a majority of the departures from PIT, DTW, Cleveland International (CLE), and Akron (CAK), are worked by this sector. The DRYER VORTAC (DJB) is located in this sector. DJB serves as one of the main over-flight VORTACS within Cleveland ARTCC, therefore the Revenna sector transitions large amounts of north/south and east/west over-flight traffic.

SECTOR WORKLOAD AND REROUTES: This sector uses heavy vectoring for the sequencing of arrivals and experiences frequency congestion and sector saturation during the busy pushes. Trackers are used several times a day and over-flight traffic is rerouted around the sector as an operational necessity.

TMU RESTRICTIONS: TMU issues a 20 MIT RALT restriction on both Chicago ARTCC and Indianapolis ARTCC on all traffic entering the Revenna sector on a real time basis.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Cleveland ARTCC

CONTACT: Jim Bartell, TMU representative, (216) 774-0428

SECTOR IDENTIFICATION: Sector 49, Lorraine, FL330 and Above, Area 4

TRAFFIC TYPES: The Lorraine sector sits directly above the Revenna sector, thus the DJB VORTAC is situated in the sector and is the main navigational aid. The sector works mainly over-flight traffic. There are many conflictions, with crossing points in the sector on east/west and north/south over-flight traffic.

SECTOR WORKLOAD AND REROUTES: This sector gets very busy and is very complex. Trackers are used extensively and sector saturation and frequency congestion is a real problem. The controllers use extensive vectoring to maintain an orderly flow of traffic. Traffic is not usually rerouted out of this sector.

TMU RESTRICTIONS: TMU issues a 20 MIT RALT restriction on Chicago ARTCC and Indianapolis ARTCC for all aircraft entering the Lorraine sector on a real time basis.

PROBLEM CURRENCY: The problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: New York ARTCC

CONTACT: Pierce Murphey, TMU Manager, (516) 468-1024

SECTOR IDENTIFICATION: Sector 34, Elmira High, FL230 and Above, Area C

TRAFFIC TYPES: The Elmira High sector is a transitional sector which works large amounts of traffic departing from the New York metro terminal area. The sector has the responsibility of separating departure traffic which is fed on three major routes: J36 to Chicago O'Hare (ORD) and Chicago Midway (MDW), J223 to DTW, and J95 traffic to the west coast. The sector also works Pittsburgh terminal arrival traffic from Boston ARTCC airspace, over-flight traffic transitioning north and south bound between Washington ARTCC and Boston ARTCC, as well as over-flight traffic from Cleveland ARTCC.

SECTOR WORKLOAD AND REROUTES: This sector gets very busy. Frequency congestion and sector saturation are seen as a real problem. Extensive vectoring and speed control is routinely used to control traffic. Trackers and hand-off personnel are used extensively to maintain a safe and orderly flow of traffic in the sector. Trackers are routinely used during the morning push from 1130z to 1230z and are assigned to the sector on a daily basis from 2100z to 2300z. Flow restrictions are implemented to restrict the amount of traffic entering the sector. Rerouting traffic out of the sector is rare.

TMU RESTRICTIONS: TMU will place the following flow restrictions for aircraft entering the Elmira high sector on as needed:

20 MIT on Pittsburgh terminal arrivals from Boston ARTCC.

10 to 15 MIT on jet departures on J36 (to ORD and MDW) from New York metro.

10 MIT on jet departures on J223 (to DTW) from New York metro.

10 MIT on jet departures on J95 (to the west coast) from New York Metro.

TMU places these departure restrictions on New York Metro to reduce sector saturation. However, the restrictions are reduced when there is a threat of departure delays.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: New York ARTCC

CONTACT: Murphey, TMU Manager, (516) 468-1024

SECTOR IDENTIFICATION: Sector 75, Milton High, FL240 and Above, Area D

TRAFFIC TYPES: The Milton High sector is a very busy arrival sector that also works an abundant amount of over-flight and climbing departure traffic. The sector works the EWR, LaGuardia (LGA), and Philadelphia (PHL) arrival traffic coming from Cleveland ARTCC, as well as over-flight traffic transitioning from west to east. Additionally, all traffic from Washington ARTCC which files to Rochester International (ROC), SYR, Buffalo (BUF), or over-flies to upstate New York is controlled by this sector. Milton High sector also controls over flight traffic from Boston ARTCC which transitions from north to south.

SECTOR WORKLOAD AND REROUTES: This sector is one of the busiest in New York ARTCC. The sector routinely faces saturation problems and frequency congestion. Flow control restrictions are implemented extensively and routinely in an effort to restrict traffic flow into this sector. Trackers and hand-off persons are routinely used for the morning push between 1200z and 1330z, and are assigned to the sector on a daily basis between 1900z and 0100z. Holding becomes necessary when New York TRACON requests 20 MIT on all EWR arrivals and 15 MIT on all LGA arrivals. Reroutes are not normally used in this sector.

TMU RESTRICTIONS: TMU issues the following flow restrictions on traffic entering the Milton High sector on a daily, as needed basis;

25 MIT on PHL arrivals from Cleveland ARTCC.

15 MIT on EWR arrivals from Cleveland ARTCC.

20 MIT on LGA arrivals from Cleveland ARTCC.

15 to 20 MIT on traffic entering the sector from Washington ARTCC.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: New York ARTCC

CONTACT: Pierce Murphey, TMU Manager, (516) 468-1024

SECTOR IDENTIFICATION: Sector 66, Manta, 7,000 feet to FL230, Area E

TRAFFIC TYPES: The Manta sector is a very small sector which works all departures from JFK filed to the south or southwest. All departures from PHL or McGuire (WRI) and satellites which file to the north or northeast transition through this sector. The Manta sector also controls EWR and JFK arrivals from the Caribbean, Islip (ISP) arrivals from the south, PHL and WRI arrivals from Boston ARTCC, and the northeast corridor over-flight traffic between Washington and Boston ARTCCs.

SECTOR WORKLOAD AND REROUTES: The Manta sector is an extremely busy sector which faces saturation problems and frequency congestion on a normal basis. The controllers use a variety on vectoring techniques and speed control along with flow restrictions to attempt to keep the sector manageable. Trackers or hand-off personnel are routinely used. Two people are assigned to the Radar position during peak hours, which normally occur three to four times per day.

TMU RESTRICTIONS: TMU issues flow restrictions for traffic entering the Manta sector as follows:

> 15 MIT on all traffic entering the sector from Boston ARTCC. (this is an all day long static restriction.)
>
> 15 MIT on all traffic entering the sector from Washington ARTCC as needed.
>
> 15 MIT on PHL jet departures.
>
> 15 MIT on JFK jet departures.

The flow restriction on the JFK jet departures, at times, causes departure delays at JFK airport.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Indianapolis ARTCC

CONTACT: John Thomas, TMU Manager, (317) 247-2222

SECTOR IDENTIFICATION: Sector 80, King High, FL240 to FL330, Area 4

TRAFFIC TYPES: The King High sector is a very busy departure sector that also works a moderate amount of arrival and over-flight traffic. The sector works all of the ORD departures which file to the south and southwest as well as the St. Louis (STL) departures which file to the southeast. The sector also sequences the STL arrivals from the east and southeast. Additionally, a large volume of eastbound over-flight traffic from Kansas City ARTCC traverses the sector, as well as westbound over-flight traffic from an internal sector at Indianapolis ARTCC.

SECTOR WORKLOAD AND REROUTES: This sector normally uses speed control and vectoring to control the departures and implements flow restrictions in an attempt to moderate the volume of traffic in the sector. The sector does experience frequency congestion and sector saturation many times daily. Trackers and coordinators are frequently used on a daily basis. The TMU rarely reroutes aircraft out of this sector.

TMU RESTRICTIONS: TMU does implement flow restrictions daily as follows:

15 MIT on jet departures off ORD. (Static restriction all day.) This restriction does cause delays at O'Hare Airport.

10 MIT on jet departures off STL.

10 MIT on jet departures off Cincinnati International Airport (CVG).

20 MIT on all over-flight traffic entering the sector on an as needed basis.

PROBLEM CURRENCY: The problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Indianapolis ARTCC

CONTACT: John Thomas, TMU Manager, (317) 247-2222

SECTOR IDENTIFICATION: Sector 30, Columbus Low, Surface to FL230, Area 6

TRAFFIC TYPES: The Columbus Low sector handles an abundance of general aviation and corporate aircraft in and out of the Ohio area. The sector works PIT, Dayton International (DAY), Columbus International (CMH), and CAK arrivals as well as CMH, CAK, and CLE departures. There is a heavy volume of general aviation overflight traffic. The Columbus Low sector provides a large amount of VFR flight following service. Additionally, the sector provides radar approach service for the Zanesville, Ohio, (ZZV) airport, which has no operational control tower.

SECTOR WORKLOAD AND REROUTES: The Columbus Low sector works a high volume of traffic and frequently experiences sector saturation and frequency overload problems. The very nature of this sector--low altitude and vast amounts of general aviation traffic--causes rapid saturation, often without warning. The use of trackers is frequent, as it is difficult to flow general aviation traffic into another sector.

TMU RESTRICTIONS: TMU issues a daily call for release restriction on all CMH departures, causing indefinite delays to some aircraft. A 15 MIT restriction is also placed on aircraft filed to PIT, so the sector can provide Cleveland ARTCC with 20 MIT on all PIT arrivals.

PROBLEM CURRENCY: The problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Chicago ARTCC

CONTACT: Bill Brunner, TMU Supervisor, (708) 906-8286

SECTOR IDENTIFICATION: Cribb Sector, Surface to FL230, East Area

TRAFFIC TYPES: The Cribb sector controls three distinct and busy departure tracks out of the Chicago Metro terminal area. The north track departure area transitions ORD departures which file to any northeast airports above the New York Metro area. The east track departure area transitions departures to airports between the New York Metro and Washington Metro areas. The third track controls Chicago satellite and MDW departures to east and northeast cities. The Cribb sector also controls over-flights transitioning from east to west.

SECTOR WORKLOAD AND REROUTES: The Cribb sector gets busy and often experiences frequency congestion and sector saturation. Trackers are used on a reactive basis and flow restrictions are routinely implemented to reduce the flow of traffic into the sector.

TMU RESTRICTIONS: TMU issues flow restrictions daily to reduce sector saturation. The first is a 250-knot speed restriction for departures on all three tracks. The next restriction placed is a 25 to 30 MIT restriction on the third track. If the sector continues to feel pressure, a 10 to 15 MIT restriction is placed on the east and north tracks. When this final restriction is placed on the east and north track departures (almost daily), ORD will back up with departures and experience delays greater than 15 minutes.

PROBLEM CURRENCY: The problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Chicago ARTCC

CONTACT: Bill Brunner, TMU Supervisor, (708) 906-8286

SECTOR IDENTIFICATION: Washington Sector, FL240 to FL350, Northwest Area

TRAFFIC TYPES: The Washington sector is a high altitude sector which transitions ORD westbound departures climbing to altitude and works a large volume of over-flight traffic. New York metro area traffic is transitioning to the west coast, and the westcoast traffic that is transitioning to the eastcoast airports. The Washington sector controls the Minneapolis/St. Paul arrivals from the south and sequences the New York Metro arrivals to provide Cleveland ARTCC with 15 MIT. The large amounts of over-flights entering this sector cause numerous confliction points and increased complexity.

SECTOR WORKLOAD AND REROUTES: The Washington sector is highly complex, busy sector. During heavy traffic periods, trackers are often used. Flow restrictions are implemented because sector saturation and frequency congestion are a daily problem. TMU often reroutes traffic around the sector or requires all over-flight traffic to enter the sector over the same fix. Additionally, to reduce saturation, TMU restricts the ORD westbound departures to FL230 or below until clear of the lateral limits of the Washington sector.

TMU RESTRICTIONS: During peak traffic periods, TMU rarely uses MIT restrictions.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Chicago ARTCC

CONTACT: Bill Brunner, TMU Supervisor, (708) 906-8286

SECTOR IDENTIFICATION: Peotone Sector, 10,000 feet to FL230, South Area

TRAFFIC TYPES: The Peotone sector is mainly a departure sector. The Traffic Management Officer estimates the sector works 70 percent departures and 30 percent over-flights. The sector controls ORD departures which file to cities from south of the Washington Metro area to Houston. The over-flight traffic, mainly props and turboprops, transitions through the sector east and westbound.

SECTOR WORKLOAD AND REROUTES: The Peotone sector is not a highly complex sector but with the abundance of ORD departures to the southeast, the sector quite often experiences frequency congestion and traffic saturation. The controllers use vectors and speed control on the departures. Over-flights are often vectored north of the Departure Transition Area (DTA) before continuing eastbound or westbound. Trackers are routinely used during heavy departure pushes.

TMU RESTRICTIONS: TMU uses reactive flow techniques with this sector. Departures are usually "front-loaded" to the saturation point. TMU then stops all ORD departures for three to five minutes. After the sector recovers, departures are resumed with a 10 to 15 MIT restriction. This restriction delays ORD departures for an unspecified period of time.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Houston ARTCC

CONTACT: David Frame, TMU Manager, (713) 230-5540

SECTOR IDENTIFICATION: Sector 38, Daisetta, Surface to FL230, Central Area

TRAFFIC TYPES: The Daisetta sector works arrivals to Houston Intercontinental (IAH), Houston Hobby (HOU) and satellite airports. There is occasionally over-flight traffic through the sector. The STAR's used by the arrivals will flip-flop depending on the active runway at IAH. When IAH is on a west operation, the Daisetta STAR is used and when IAH is on an east operation, the Daybo STAR is used. This creates a lot of crossing traffic when a flip-flop goes into effect.

SECTOR WORKLOAD AND REROUTES: The Daisetta sector is usually only a moderately busy sector that gets very busy during the arrival pushes. During peak arrival times, which occur four times throughout the day, the sector experiences saturation and frequency congestion. The controllers use complex vectoring and speed control on the arrivals. If IAH is experiencing delays because of runway acceptance rate, the delay is absorbed in the sector through a use of speed and vectoring. The TMU will reroute aircraft to another arrival fix during the peak times to help reduce sector and frequency saturation. Trackers and coordinators are common during the busy periods.

TMU RESTRICTIONS: Flow restrictions are often implemented during peak arrival times. TMU will issue a 15 MIT restriction on all aircraft entering the Daisetta sector from Fort Worth ARTCC and 15 MIT on all Houston terminal arrivals from Memphis ARTCC.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination on cost to system users.

FACILITY: Houston ARTCC

CONTACT: David Frame, TMU Manager, (713) 230-5540

SECTOR IDENTIFICATION: Sector 26, Woodville, FL240 and Above, Central Area

TRAFFIC TYPES: The Woodville sector overlies the previously mentioned Daisetta sector. The sector has the responsibility of sequencing arrivals for IAH, HOU, and satellite airports. The sector accepts arrival traffic on three different streams. The first stream is from Fort Worth ARTCC, the second two streams are from internal sectors, one of which is fed from Memphis ARTCC. The arrival and over-flight traffic worked by the sector is a mixture of jet and turboprop aircraft.

SECTOR WORKLOAD AND REROUTES: The sector is a moderately busy sector that gets very busy during the arrival pushes. During these busy periods, trackers and coordinators are used extensively. TMU will select certain aircraft and reroute them to another arrival fix to help alleviate sector saturation and frequency congestion.

TMU RESTRICTIONS: When flow is implemented, it is usually 15 MIT on aircraft entering the sector from Fort Worth ARTCC and 15 MIT on all Houston terminal arrivals from Memphis ARTCC.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination on cost to system users.

FACILITY: Albuquerque ARTCC

CONTACT: Roger Mandaville, TMU Manager, (505) 856-4590

SECTOR IDENTIFICATION: Sector 93, Gallop High, FL270 and Above, North Area

TRAFFIC TYPES: This sector works arrivals, departures and over-flights. The sector is Albuquerque's busiest arrival sector into the Phoenix terminal area. The sector is responsible for sequencing Phoenix (PHX) arrivals from the east and Albuquerque (ABQ) arrivals transitioning from the north. The Gallop High sector also works the Phoenix area departures and has heavy en route over-flight traffic transitioning east to west. This sector has the responsibility for sequencing the Los Angeles terminal arrivals traversing the airspace.

SECTOR WORKLOAD AND REROUTES: The Gallop High sector stays moderately busy throughout the day and experiences heavy to extremely heavy volume, and frequency congestion during peak arrival times. During these times, the controller will use vectoring techniques and speed control on the arrivals for sequencing. Additionally, TMU will restrict ABQ arrivals from the north to FL280 in an attempt to stay below the heaviest streams of traffic in the sector. TMU also reroutes aircraft around the sector to help alleviate congestion. Trackers and coordinators are commonly used at different times throughout the day at this sector.

TMU RESTRICTIONS: When flow restrictions are implemented, it is usually a 10 to 15 MIT restriction on aircraft entering the sector from other internal sectors. TMU issues an altitude restriction on ABQ arrivals from Denver ARTCC and reroutes over-flight aircraft from Denver ARTCC to entirely miss the sector.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of costs to system users.

FACILITY: Seattle ARTCC

CONTACT: Leon Fulner, TMU Specialist, (206) 351-3500

SECTOR IDENTIFICATION: Sector 6, Surface to FL230, Area B

TRAFFIC TYPES: Seattle ARTCC Sector 6 controls arrivals, departures, over-flights and provides radar approach service for a VFR tower. The sector works departures from the Portland International Airport (PDX) which file to the bay area airports and departures from Eugene terminal area which file to the Portland terminal area. The bulk of traffic between Eugene and Portland is general aviation and package hauling turboprop aircraft (a main United Parcel Service facility is located in Portland, Oregon). Sector 6 is responsible for sequencing Los Angeles, San Diego, Las Vegas and Reno, Nevada arrivals which depart from the Portland terminal area. The sector has heavy north to south over-flight traffic and provides extensive VFR flight following.

SECTOR WORKLOAD AND REROUTES: Sector 6 is Seattle ARTCC's busiest sector. The controllers have problems with frequency congestion because of the large amount of general aviation and VFR traffic. The use of trackers or coordinators is not a common practice in Seattle Center. The Radar controller has to rely on extensive assistance from the manual controller.

TMU RESTRICTIONS: When flow restrictions are issued for this sector, it is usually a minutes-in-trail restriction on Eugene terminal departures filed to the Portland terminal area. This restriction does cause significant delays on departing aircraft.

PROBLEM CURRENCY: This problem currently exists, but has been significantly reduced. Permanent reroutes are in place which route aircraft around the sector. Those aircraft allowed in the sector must be on specific routes. The package hauling aircraft have altered their departure times to help alleviate the saturation problem, and have gained better service with fewer delays.

COST TO USERS: No determination of cost to system users.

FACILITY: Fort Worth ARTCC

CONTACT: Bob Dearing, TMU Manager (817) 858-7520

SECTOR IDENTIFICATION: Sector 47, Wichita Falls, FL240 and Above, Northwest Area

TRAFFIC TYPES: The Wichita Falls sector works arrivals into the Dallas-Fort Worth terminal area and over-flight traffic. About 80 percent of the traffic in this sector is arrivals. The Wichita Falls sector has three streams of arrivals which must be sequenced and handed off to the low altitude sector. The over-flight traffic is usually north to south, and crosses the arrival streams which are from east to west.

SECTOR WORKLOAD AND REROUTES: The Wichita Falls sector is a busy arrival sector which routinely experiences sector saturation and frequency congestion. Trackers and coordinators are used approximately two or three times a day for extended time periods. The sector, at times, is forced to hold aircraft. Extensive radar vectors and speed control are used by the controllers to sequence these arrivals. During peak arrival pushes, the TMU will reroute over-flight traffic around this sector to reduce saturation.

TMU RESTRICTIONS: When flow restrictions are used, it is usually 10 MIT Regardless of Altitude (RALT) on all aircraft entering the sector from Albuquerque ARTCC. One of the arrival streams is also eliminated, which reduces the three streams to two.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Fort Worth ARTCC

CONTACT: Bob Dearing, TMU Manager, (817) 858-7520

SECTOR IDENTIFICATION: Sector 83, Quitman, 11,000 feet to FL230, East Area

TRAFFIC TYPES: The Quitman sector controls the Dallas-Forth Worth (DFW) departures filed to the east coast. Additionally, there are a limited number of over-flights which traverse the sector. The sector controls three DTA's out of the Dallas-Fort Worth terminal area. The sector uses the 3 MIT and constantly increasing rule (FAAO 7710.65 para. 5-72) on DFW departures, if the aircraft courses eventually diverge.

SECTOR WORKLOAD AND REROUTES: The Quitman sector becomes extremely busy during the departure pushes and experiences heavy sector and frequency saturation periods. The controllers use speed control and vectors to transition departures. Trackers are very common at this sector throughout the day.

TMU RESTRICTIONS: TMU issues a 7 MIT restriction on Dallas-Fort Worth terminal departures during the busy periods. This forces the TRACON to put a 4 MIT restriction on the Dallas-Fort Worth tower. This trickle-down effect does cause delays for departure aircraft. The delays are usually less than 15 minutes, and therefore are not reported .

PROBLEM CURRENCY: This problem currently exists. The TMU has requested airlines which are departing for certain cities to file over a different DTA during certain times of the day to help reduce the amount of aircraft entering this sector. This has had limited success because of the flying time which would be added to the flights in question.

COST TO USERS: No determination of costs to system users.

FACILITY: Denver ARTCC

CONTACT: Jo Albers, TMU Specialist, (303) 651-4261

Denver Center has no sectors that fit our criteria.

FACILITY: Minneapolis ARTCC

CONTACT: Jack Huber, TMU Manager, (612) 463-5512

SECTOR IDENTIFICATION: Sector 17, Mason City High, FL240 and Above, Area 2

TRAFFIC TYPES: The Mason City High sector works departures, arrivals and over-flights. The sector controls aircraft departing from, and sequences aircraft arriving to, the Minneapolis-St. Paul terminal area. The sector also sequenced arrivals from the west coast cities to ORD and delivered the aircraft in-trail to Chicago ARTCC. (This traffic has since been rerouted out of this sector because of saturation, see PROBLEM CURRENCY below.) The sector works a large amount of over-flight traffic transitioning east to west.

SECTOR WORKLOAD AND REROUTES: The Mason City high sector was the busiest sector in Minneapolis ARTCC. The sector was routinely saturated with traffic. Frequency congestion was often a major problem. The sector often used trackers and coordinators. TMU issued daily restrictions, forcing the outlying sectors to reroute over-flights around the Mason City High sector for the majority of the day.

TMU RESTRICTIONS: TMU implemented flow restrictions as follows to help alleviate the sector saturation:

15 MIT on ORD traffic entering the sector from Denver ARTCC.

15 MIT on ORD traffic entering the sector from Salt Lake ARTCC.

15 MIT RALT on traffic entering the sector from all internal sectors.

PROBLEM CURRENCY: The problems in this sector have been reduced significantly by permanently rerouting all ORD traffic through another sector, located 25 miles south of the Mason City High sector. This was a win-win situation in that it reduced the volume of traffic through the sector, and it shortened the route of flight for the ORD arrivals. The only negative is that Chicago ARTCC requires 25 MIT on the ORD arrivals on this new route.

COST TO USERS: No determination of cost to system users.

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FACILITY: Minneapolis ARTCC

CONTACT: Jack Huber, TMU Manager, (612) 463-5512

SECTOR IDENTIFICATION: Sector 6, Surface to FL230, Area 2

TRAFFIC TYPES: This sector controls all departures off the Minneapolis-St. Paul terminal area that file to east coast cities. There are two DTA's feeding departures into the sector. Sector 6 also controls arrivals to the Minneapolis St. Paul terminal area. There is no over-flight traffic through this sector.

SECTOR WORKLOAD AND REROUTES: Sector 6 becomes saturated many times throughout the day. Frequency congestion is a noted problem. The controllers use extensive vectoring and speed control on both the arrivals and departures. Trackers are common at least a twice a day. TMU often reroutes arrival aircraft to another arrival fix to help alleviate the sector saturation and frequency congestion.

TMU RESTRICTIONS: When Sector 6 becomes busy, TMU places a 10 MIT restriction on the Minneapolis-St. Paul terminal departures. This departure restriction does cause delays at the airport. The delays are usually shorter than 15 minutes, and therefore not reported. TMU issues a 10 MIT restriction on all Minneapolis-St. Paul arrivals from Chicago ARTCC and 15 MIT restriction on the arrivals from all internal sectors.

PROBLEM CURRENCY: The problem currently exists, but the Airspace & Procedures office is developing airspace changes to attempt to alleviate the congestion.

COST TO USERS: No determination of cost to system users.

FACILITY: Salt Lake ARTCC

CONTACT: Jim Kelsey, TMU Manager, (801) 320-2581

SECTOR IDENTIFICATION: Sector 45, Tonopah High, FL310 and Above, Area C

TRAFFIC TYPES: This sector controls arrivals and departures in and out of the Bay TRACON area. The arrivals are inbound to San Francisco (SFO), San Jose (SJC), and Oakland (OAK). The arrivals are sequenced inÄtrail per airport and handedÄoff to Oakland ARTCC. The departures are filed to the east coast and northern cities. Over-flight traffic through the sector transitions east/west and north/south.

SECTOR WORKLOAD AND REROUTES: Tonopah High is a moderately busy sector that encounters heavy arrival and departure traffic periods throughout the day. Controllers use extensive vectors on the arrivals to sequence the traffic for Oakland ARTCC. Trackers are used occasionally throughout the day to help maintain an orderly flow of traffic and assist the radar controller with the overall volume. During peak arrival times, TMU reroutes the SFO arrivals around the sector to another arrival fix to alleviate sector overload and frequency congestion.

TMU RESTRICTIONS: Flow control restrictions are not regularly used in this sector.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Kansas City ARTCC

CONTACT: Mike Brown, TMU Manager, (913) 791-8451

SECTOR IDENTIFICATION: Sector 22, Garden City High, FL240 and Above, Prarie Area

TRAFFIC TYPES: This sector is of average size and is exclusively an over-flight sector. Streams of aircraft enter the sector at many different fixes and encounter a substantial amount of crossing traffic. The over-flight traffic transitions to the north, south, east, and west.

SECTOR WORKLOAD AND REROUTES: The controllers working Garden City High must contend with many crossing routes and confliction points throughout the sector. Vectors and altitude changes are the most common tools used by the controllers. Trackers are commonly used throughout the day. During busy saturation periods, normally 1500z to 1600z and 2200z to 2300z, the TMU selects aircraft from internal sectors and reroutes them around the airspace.

TMU RESTRICTIONS: TMU issues the following dynamic in-trail restrictions to help alleviate the saturation in this sector:

10 MIT on Denver (DEN) arrivals from Fort Worth ARTCC.
10 MIT on ORD arrivals from Albuquerque ARTCC.

PROBLEM CURRENCY: The problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Kansas City ARTCC

CONTACT: Mike Brown, TMU Manager, (913) 791-8451

SECTOR IDENTIFICATION: Sector 30, Hallsville High, FL240 and Above, Ozark Area.

TRAFFIC TYPES: Hallsville High is a transitional sector, controlling westcoast departures and arrivals in and out of the St. Louis terminal area. Arrivals flow into the sector on three different transitions to the same STAR. The arrivals are blended into one stream and handed-off to the low altitude controller. Over-flight traffic traverses the sector from north to south, and east to west.

SECTOR WORKLOAD AND REROUTES: Hallsville High experiences frequency congestion and sector saturation quite often. Controllers use extensive vectors and speed control on arrivals. Sector saturation sometimes leads to holding. Trackers are commonly used at this sector. To alleviate saturation during peak arrival periods, TMU selects aircraft and reroutes them around the sector. These reroutes effect only internal sectors at Kansas City ARTCC.

TMU RESTRICTIONS: Flow control restrictions are not commonly used at this sector. When restrictions are implemented it is usually 10 MIT on westbound departures from the St. Louis terminal area. This restriction does not delay STL operations.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Oakland ARTCC

CONTACT: Russ Summer, TMU Manager, (510) 745-3475

SECTOR IDENTIFICATION: Sector 32, FL240 and Above, Area E

TRAFFIC TYPES: Sector 32 is a high altitude sector controlling departures filed from Bay TRACON to any destination east of Bay TRACON. Departures flow into the sector on three streams and converge over a single fix, the Linden VORTAC. Over-flights and a limited amount of military traffic are also controlled by Sector 32.

SECTOR WORKLOAD AND REROUTES: Sector 32 controllers experience sector saturation and frequency congestion from the large amount of eastbound departure aircraft which transition over Linden VORTAC. The use of trackers or coordinators is not common in Oakland ARTCC. TMU issues restrictions to Bay TRACON to limit the number of aircraft entering this sector during busy periods.

TMU RESTRICTIONS: During the busy departure periods, TMU issues a 10 MIT restriction on the jet departures from Bay TRACON. Bay TRACON in turn passes the restriction on to SFO tower. The SFO tower restriction occasionally causes gate holds.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Oakland ARTCC

CONTACT: Russ Summer, TMU Manager, (510) 745-3475

SECTOR IDENTIFICATION: Sector 33, FL240 and Above, Area E

TRAFFIC TYPES: Sector 33 at Oakland ARTCC works the high altitude departure traffic previously worked by Sector 32, as discussed on the previous page. As in Sector 32, the departures all transition over a single fix, the Linden VORTAC. Sector 33 has the additional responsibility of controlling Bay TRACON arrivals to SFO, OAK, and SJC.

SECTOR WORKLOAD AND REROUTES: Sector 33 is the busiest sector at Oakland ARTCC. Frequency congestion and sector saturation are often a problem. Trackers are not commonly used at Oakland ARTCC. During busy periods, the TMU selects certain over-flights and reroutes the aircraft around the sector. Additionally, some arrivals are rerouted to another arrival fix to alleviate congestion at Sector 33.

TMU RESTRICTIONS: During busy periods, TMU issues a 10 to 15 MIT restriction on Bay TRACON arrivals from Salt Lake ARTCC.

PROBLEM CURRENCY: This problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Atlanta ARTCC

CONTACT: Danny Mc Millan, TMU Specialist, (404) 946-7656

SECTOR IDENTIFICATION: Sector 32, Spartanburg, FL240 to FL290, Area 2.

TRAFFIC TYPES: Spartanburg High controls aircraft departing to the east from Hartsfield Atlanta International airport (ATL) and aircraft departing west from Charlotte International Airport (CLT). Arrivals to CLT from the southwest are vectored for initial inÄtrail spacing by this sector. Over-flight traffic is often heavy.

SECTOR WORKLOAD AND REROUTES: Each afternoon, a departure push off ATL, a departure push off CLT, and an arrival push into CLT coincide. Frequently, over-flight traffic is also a factor during this time period. MIT restrictions are issued to ATL TRACON. Traffic out all ATL departure gates is affected. A tracker is routinely used at this sector. Sector saturation and frequency congestion are constant problems for sector 32.

TMU RESTRICTIONS: TMU issues restrictions daily for this sector's afternoon rush. All CLT arrivals are required to be at or below FL290. MIT restrictions are issued to ATL TRACON. An internal sector is required to provide Spartanburg sector 10 MIT RALT. All aircraft entering the sector must be on airways or approved routes of flight. The following restriction is issued:

From 1730z to 1845z -- CLT landing traffic into sector 32 must be 10 MIT and at or below FL290. No directs. ATL Departures -- 2 streams 20 MIT all east departures requesting at or above FL290.

PROBLEM CURRENCY: The problem currently exists, even after Delta Airlines changed their departure schedule to help alleviate the delays and their associated costs.

COST TO USERS: A departure operational review was conducted by ATL and released on 02-22-94. This report shows the average taxi time of ALL aircraft departing from ALL gates is increased by almost three minutes when this restriction is issued.

FACILITY: Atlanta ARTCC

CONTACT: Danny Mc Millan, TMU Specialist, (404) 946-7656

SECTOR IDENTIFICATION: Sector 09, Tiroe, Surface to FL230, Area 5.

TRAFFIC TYPES: Tiroe is an arrival sector which feeds inbound traffic to ATL TRACON. When ATL is on a west operation, Tiroe provides in-trail spacing to two streams of arrival traffic.

SECTOR WORKLOAD AND REROUTES: Jets are delivered to ATL TRACON at 14,000 feet and turboprops are delivered at 11,000 feet. In-trail spacing is obtained with a mixture of extensive vectors, speed control, and holding. Sector saturation and frequency congestion are a major problem, and often lead to arrival delays.

TMU RESTRICTIONS: TMU issues restrictions daily for this sector only during reduced arrival rate situations at ATL (i.e., IFR conditions). Aircraft are often delayed because of the sheer volume of traffic and frequency congestion in the sector. At times, the sector is unable to deliver aircraft to ATL at minimum in-trail because of frequency congestion.

PROBLEM CURRENCY: The problem currently exists.

COST TO USERS: No determination of cost to system users.

FACILITY: Atlanta ARTCC

CONTACT: Danny Mc Millan, TMU Specialist, (404) 946-7656

SECTOR IDENTIFICATION: Sector 19, Sinca, Surface to FL230, Area 4.

TRAFFIC TYPES: Sinca is an arrival sector which feeds inbound traffic to ATL TRACON. When ATL is on an east operation, Sinca provides in-trail spacing to two streams of arrival traffic.

SECTOR WORKLOAD AND REROUTES: Jets are delivered to ATL TRACON at 14,000 feet and turboprops are delivered at 11,000 feet. In-trail spacing is obtained with a mixture of extensive vectors, speed control, and holding. Sector saturation and frequency congestion are a major problem, and often lead to arrival delays.

TMU RESTRICTIONS: TMU issues restrictions daily for this sector only during reduced arrival rate situations at ATL (i.e., IFR conditions). Aircraft are often delayed because of the sheer volume of traffic and frequency congestion in the sector. At times, the sector is unable to deliver aircraft to ATL at minimum in-trail because of frequency congestion.

PROBLEM CURRENCY: The problem currently exists.

COST TO USERS: No determination of cost to system users.