

**AMENDMENT NO. 2 TO MEMORANDUM OF AGREEMENT NO. 119877**

Among the  
Federal Aviation Administration ("FAA")  
Phoenix Terminal Radar Approach Control  
and  
City of Phoenix, City of Tempe, and Phoenix-Mesa Gateway Airport Authority

This Amendment No. 2 to the Memorandum of Agreement ("MOA") is made and entered into as of the last signature date below, by and among the City of Phoenix, an Arizona municipal corporation (hereinafter referred to as "Phoenix"), City of Tempe, an Arizona municipal corporation (hereinafter referred to as "Tempe"), Phoenix-Mesa Gateway Airport Authority, formerly Williams Gateway Airport Authority, an Arizona joint powers airport authority (hereinafter referred to as "PMGAA") and the Federal Aviation Administration Phoenix Terminal Radar Approach Control (hereinafter referred to as "FAA TRACON") to allow access to and use of FAA Flight Track Data.

**RECITALS**

1. Phoenix acting by and through its Aviation Department, Tempe, and PMGAA all referred to herein collectively as "USERS", request that the FAA provide the USERS access to certain Flight Track Data to support Phoenix Sky Harbor International Airport's ("Airport") Noise Compatibility Plan under 14 CFR Part 150 and the Airport's Noise and Flight Track Monitoring System ("NFTMS"). The FAA agrees to provide USERS access to certain Flight Track Data and to allow the USERS to use that Flight Track Data as set forth in this MOA.
2. Between 1996 and 2006 Phoenix received Flight Track Data from the FAA TRACON through an ARTS Interface system. The FAA Flight Track Data was received pursuant to a Memorandum of Agreement No. 73952. On November 7<sup>th</sup>, 2006 the new Phoenix FAA Air Traffic Control Tower and Terminal Approach Control facility opened, which required the collection of Flight Track Data to be collected by a new software system. Phoenix and the FAA TRACON entered into a new Memorandum of Agreement (No. 119877) that allowed Phoenix to replace the ARTS Interface system with a STARS Interface system. Amendment No. 1 of Memorandum of Agreement No. 119877 expires October 20<sup>th</sup>, 2010 and this Amendment No. 2 extends the term for two (2) years.
3. Effective July 2009, Williams Gateway Airport Authority changed its name to Phoenix-Mesa Gateway Airport Authority. This Amendment No. 2 reflects the name change.
4. The FAA enters into this Amendment No. 2 pursuant to 49 United States Code Section 106 (l) 6.
5. This Amendment No. 2 was authorized by Formal Action of the Phoenix City Council on \_\_\_\_\_, 2010.
6. This Amendment No. 2 was authorized by Tempe City Council on \_\_\_\_\_, 2010.
7. This Amendment No. 2 was authorized by Phoenix-Mesa Gateway Airport Authority on \_\_\_\_\_, 2010.

**NOW, THEREFORE**, it is agreed by and between the parties as follows:

## **SECTION I** **DEFINITIONS**

For purposes of this MOA, the terms set forth below shall have the following meaning:

“ARTS” means Automated Radar Terminal System. Controllers use ARTS to provide air traffic control services to aircraft in terminal areas. Typical terminal area air traffic control services include the separation and sequencing of air traffic, the provision of traffic alerts and weather advisories, and radar vectoring for departing and arriving traffic.

“Data” means a generic term pertaining to information related to the path of aircraft flights within the terminal environment of the Airport derived from the PHX ASR-9 and future ASR 11. When not contextually clear, the specific type, or stage of data evolution is described by one of the definitions below.

“Filtered/Aged Data” means the same as Raw Data with the exception that the information has been filtered by squawk code and aged per the terms of this MOA.

“Flight Track Data” means (i) data for Phoenix Sky Harbor International Airport and other local airports within a 40 nautical mile radius of the Airport. The upper tracking threshold shall be 23,000 feet above mean sea level; (ii) data for all in flight activity at the Airport and other local airports within a 40 nautical mile radius of the Airport, 24 hours a day, 7 days a week for commercial and general aviation aircraft operations conducted under both Visual Flight Rules and Instrument Flight Rules. Military operations are not covered by this MOA and therefore, military operations data will not be released to the USERS; and (iii) data that will be extracted from all information transmitted from the FAA TRACON computer/radar system in the Phoenix FAA Air Traffic Control Tower and Terminal Approach Control facility and will be aged and filtered by Phoenix’s System, in accordance with FAA Order JO 6000.198A - FAA Maintenance of NAS Defense Facilities and Services. After aging and filtering, the data will be transmitted to the USERS to be further processed for use in the NFTMS.

“NFTMS” means Noise and Flight Track Monitoring System used primarily to track the movement of aircraft and the noise caused at certain locations and other uses further elaborated upon in other Sections of this MOA.

“NFTMS Data” means Processed Data that, accessed by special software, permits viewing and/or analysis on NFTMS client-stations and includes graphical representations and tabular information.

“Processed Data” means Filtered/Aged Data that has been transmitted to the NFTMS main server and integrated with a database so that queries can be executed and it can be viewed or analyzed on NFTMS client-stations.

“Public” means the general public other than those USERS authorized by this MOA to access STARS and NFTMS data.

“Raw Data” means information pertaining to individual aircraft flights (accessed through the STARS Interface) and containing geo-referenced points that, when connected, form flight tracks (the path, projected on the ground, of an aircraft in flight). This is the same data used by Air Traffic Control to fulfill its mission to safely separate and sequence aircraft operations. See Appendix B for a summary of message set collection.

“STARS” means Standard Terminal Automation Replacement System. This is an FAA program to replace capacity-constrained, older technology systems such as ARTS at FAA terminal radar approach control facilities and associated towers. Controllers will use STARS to provide air traffic control services to aircraft in terminal areas. Typical terminal area air traffic control services include the separation and sequencing of air traffic, the provision of traffic alerts and weather advisories, and radar vectoring for departing and arriving traffic.

“System” means hardware and software used to access, filter, and age the data obtained through the STARS Interface.

## **SECTION II** **DESCRIPTION**

A. FAA shall provide the USERS, to the extent set forth in this MOA and Appendices, the authority to utilize Flight Track Data processed by the Air Traffic Control (“ATC”) computer/radar systems at the Airport, to extract certain agreed upon Flight Track Data by the use of the STARS Interface System and to transmit such Flight Track Data via electronic means to USERS. Military operations are not covered by this MOA and therefore, military operations data will not be released to the USERS.

B. FAA will provide Data to the USERS but shall not be held responsible or have any legal obligation for the accuracy or validity of the Data.

C. This MOA contains the requirements for (i) providing of the Data; (ii) use of the Data; and (iii) installation, use and maintenance of the System.

D. Phoenix’s contractor, ERA Systems Corporation (“ERA”) of Alexandria, VA, will provide a STARS Interface System to be installed at the new FAA TRACON facility in Phoenix, Arizona for the purpose of correlating Flight Track Data with noise monitoring data collected by the USERS. The System will include a primary PC and a backup data collection PC with peripherals. Both PCs will collect, process, and filter STARS data but only the primary PC will age and transfer the data to Phoenix’s Noise Abatement Office. The backup data collection PC will provide processed data in the event that the data is unusable on the primary PC and is capable of taking over the aging and transferring process, if necessary. Data will be filtered and aged in compliance with the MOA.

## **SECTION III** **FAA’S RESPONSIBILITIES**

A. The FAA will release the Data to Phoenix, subject to the terms of this MOA, no more than one (1) day from the date it is generated, but no less than fifteen (15) minutes, unless this MOA is further amended by the parties to provide otherwise. Both FAA and USERS agree that the release of the Flight Track Data may be delayed due to operational necessity and/or hardware unavailability. No Flight Track Data will be released to the USERS unless and until it has been filtered and aged by the installed System.

The FAA will also extract from the Data to be released any information which is not filtered out by the installed System concerning VIP or Presidential aircraft, military flights, aircraft incidents and any other information deemed sensitive by the FAA, at its sole discretion. Final authority to deny access to the Data or other information in accordance with the terms of this MOA shall rest with FAA TRACON.

B. All computer programs and equipment comprising the System described herein to be installed pursuant to this MOA and any and all future upgrades shall continue to conform to

established FAA criteria and performance standards. FAA TRACON personnel will be present during the installation, testing, demonstration, servicing, and removal of the System. FAA TRACON agrees to provide space and utilities access to the facility to Phoenix's designated personnel for the purpose of installing, testing, repairing, removing, or returning computer equipment at the mutual convenience of the parties with at least twenty-four (24) hours notice, normally Monday through Friday from 08:00 local time until 16:30 local time. FAA TRACON and Phoenix will coordinate any momentary interruption or voltage variations to the electrical power provided by the FAA.

The Schematic of ERA's STARS Interface TRACON Hardware Block Diagram is attached as Appendix A and details the technical connections for PCs, Ethernet Hubs, External Modems, Routers, and Essential Power Sources. FAA agrees to provide Phoenix with an FAA approved equipment rack (25"W x 32"D x 74"H approximate) to contain all hardware. FAA will also provide space and required electrical power, which include 20 AMP 110 VAC circuit (essential or critical power). Two standard dial-up phone lines will be provided by Phoenix.

C. FAA will perform a risk analysis on the System by conducting a Security Evaluation in accordance with FAA Order 1370.82.

D. FAA shall notify Phoenix by telephone, facsimile, or email communication of all System software, hardware, and telecommunications problems within twenty-four (24) hours of the discovery of any process aberration or equipment failure.

E. FAA Technical Operations System Specialists will be familiar with the removal of all connecting hardware in the event of equipment problems and/or failures.

F. The FAA Air Traffic Manager at FAA TRACON, or designee, shall have the authority to disconnect all System interface devices for operational purposes without prior notification and coordination with Phoenix. The FAA Air Traffic Manager at FAA TRACON, or designee, shall make reasonable attempts to notify Phoenix before any disconnection or interruption in service. All parties understand that service interruptions may occur due to operational necessity, safety and security concerns, and/or hardware failure.

Should a disconnection or interruption occur without prior notification to Phoenix, the FAA will promptly notify Phoenix by telephone, facsimile, or email communication upon discovery of the disruption of Data flow or, if outside the business hours of 08:00 through 16:30 local time, Monday through Friday, by 09:00 the following business day. For a scheduled interruption of Data, the FAA TRACON will notify Phoenix twenty-four (24) hours prior to the scheduled interruption, if possible. This in no way abrogates the FAA TRACON's right to disrupt the flow of Data without notice, if dictated by operational necessity. FAA TRACON shall not be held responsible or retain any legal obligation as to the continued availability of the Data.

G. FAA TRACON personnel shall abide by and be subject to all software licensing agreements and copyrights that apply to any software installed in the System and agree not to install any unrelated or additional software on the System without the expressed written consent of Phoenix.

#### **SECTION IV** **USERS' RESPONSIBILITIES**

A. Phoenix will install a data acquisition System outlined in Appendix A. All computer programs and equipment to be installed and operated in the FAA TRACON facility will be subject to FAA

approval. The System will ensure that all radar information is screened to filter out the restricted Data prior to that Data leaving the FAA TRACON. The System shall be subject to random output testing conducted at the request of the FAA regional security representative or the Automated Information Systems Security Branch, or the Air Traffic Manager (or designee). The System's software program(s) shall have commands available to designated FAA personnel that will allow temporary interruption of the flow of Data, but will not compromise the integrity of the ATC computer/radar system.

B. USERS shall release Flight Track Data to the Public in NFTMS Data format only, unless otherwise required by law or by order of a court of competent jurisdiction. If USERS are required to release Flight Track Data in any other format, USERS shall notify FAA TRACON prior to release of Flight Track Data via facsimile or email communication. Notice must be provided promptly to the FAA TRACON upon any party's receipt of an alternative format request to allow FAA TRACON sufficient opportunity to take any action it deems appropriate.

If the USERS do not receive a response from the FAA TRACON within two (2) business days after notice was provided by USERS, then USERS shall determine whether or not the Flight Track Data is subject to access according to Arizona's Public Records Laws without any further FAA response. FAA agrees to advise the USERS of any federal exemption that may be in effect with respect to any specific public records request.

All requests for Flight Track Data other than that in NFTMS Data format must be directed to the FAA.

C. USERS shall not provide Raw Data, Filtered/Aged Data, and/or Processed Data to the Public. A violation of this provision may result in the cessation of Data transmission and/or the termination of this MOA. Exceptions to this prohibition include providing such Data to other non-public entities including, but not limited to:

- 1) Other FAA offices;
- 2) Certain noise/aircraft operations consultants under supervision of Phoenix; and
- 3) Personnel working with Phoenix for the purpose of airspace development or in the furtherance of other NFTMS objectives, after obtaining approval from the FAA's Air Traffic Manager at FAA TRACON, or designee.

D. Except as otherwise provided herein, the USERS may use the Flight Track Data for their own purposes including, but not limited to:

- 1) Monitoring operational compliance with Phoenix's noise abatement procedures;
- 2) The analysis of flight operations;
- 3) Correlation of recorded noise events with aircraft operations;
- 4) Assessment and collection of landing fees;
- 5) Reports and analyses derived from the Data, such as flight track trajectories and flight events over given areas during certain time periods, as well as other derived Data of a similar nature (subject to all other provisions of this MOA); and
- 6) For other administrative purposes that are not expressly prohibited by this MOA.

E. USERS may not use the Flight Track Data for legal actions without the prior approval of the FAA with the exception of cases involving the assessment or collection of landing fees. The Flight Track Data may not be used to enforce noise abatement regulations. Publicly released reports shall not contain specific:

- 1) Aircraft flight ID numbers;
- 2) FAA registry numbers; or
- 3) Aircraft owner information.

F. Except as otherwise required by law, USERS shall not release Flight Track Data if advised by the FAA that it contains information relating to:

- 1) Military operations;
- 2) Aircraft incidents; or
- 3) Other sensitive matter as articulated in FAA Order 1200.22.

G. Phoenix agrees that any property of the United States damaged or destroyed incident to the installation, testing or repair of the System by Phoenix personnel or its designated contractor shall be promptly repaired or replaced by Phoenix to the condition it was in prior to such damage and to the reasonable satisfaction of the FAA or in lieu of such repairs or replacement, Phoenix shall, if so required by the FAA, pay to the United States money in an amount sufficient to reasonably compensate the United States for such damage or destruction.

H. Each USER agrees, to the extent permitted by applicable law, to indemnify and hold harmless the FAA, its agents, officers, and employees, from and against all claims, demands, damages, liabilities, losses, suits, judgments, (including all costs and expenses incident thereto) which may accrue against, be suffered by, be charged to, or recoverable from the FAA, its agents, officers, and employees, to the extent such claims arise out of negligent acts or omissions of that USER, its employees, and agents under this MOA. No USER shall be liable for such claims arising out of the negligent acts or omissions of any other USER. In the event a USER holds or obtains insurance in support of this promise, a certificate of insurance shall be delivered to the FAA upon request.

I. All System equipment shall be installed in accordance with FAA standards 019d. Phoenix, or its designated contractor, shall install and pay for the System and all System equipment including, but not limited to:

- 1) System's Interface devices;
- 2) Hardware;
- 3) Software; and
- 4) All other auxiliary equipment under this MOA. Should Phoenix deem it necessary to install additional equipment or incur other expenses in connection with this MOA, Phoenix, or its designated contractor, will pay for those costs. The System and all System equipment installed by Phoenix shall at all times remain the property of Phoenix.

J. The System provided by Phoenix will have the capabilities to allow the FAA TRACON to:

- 1) Terminate transmission at any time subject to the provisions of this MOA;
- 2) Selectively, and at its sole discretion, exclude additional Data based upon beacon codes and/or aircraft identification including, but not limited to, military operations and aircraft incidents; and
- 3) Filter air traffic control Data to meet Civil Aviation Security Standards.

## **SECTION V**

### **INTERAGENCY COMMUNICATIONS**

All notices, demands, requests, consents, and approvals given by any party to another under this MOA shall be in writing and shall be sent by registered or certified mail, postage prepaid to the parties at the following addresses, unless otherwise provided in this MOA. All required telephonic/facsimile/email notices shall be made to the individuals designated in this section. Any party may, at any time, change its respective address/phone/facsimile/email addresses by sending written notice to the other party of the change. Notices shall be deemed to be received upon deposit in the mail, properly addressed.

If to FAA: FAA Manager, Phoenix TRACON  
3500 East Sky Harbor Boulevard  
Phoenix, AZ 85034

(602) 306-2500 Phone  
(602) 220-1716 Facsimile

If to Phoenix: City of Phoenix Aviation Department  
Noise Abatement Office  
3400 East Sky Harbor Boulevard, Suite 3300  
Phoenix, AZ 85034-4405

(602) 273-4300 Phone  
(602) 273-3472 Facsimile

If to Tempe: City of Tempe  
Public Works Department, Water Utilities Division  
255 East Marigold Lane  
Tempe, AZ 85281

(480) 350-8300 Phone  
(480) 350-8336 Facsimile

If to PMGAA: Phoenix-Mesa Gateway Airport Authority  
Community Relations Office  
5835 South Sossaman Road  
Mesa, AZ 85212

(480) 988-7600 Phone  
(480) 988-2315 Facsimile

## **SECTION VI** **TERMINATION OF AGREEMENT**

Any party may terminate this MOA by giving ninety (90) days prior written notification to the other parties. The duration of this MOA shall not exceed two (2) years from the date of the last signature. Upon termination of this MOA, the System will be removed by Phoenix at no cost to the FAA.

## **SECTION VII** **ADDITIONAL PROCEDURES AND RESTRICTIONS**

All FAA security requirements governing access to both Data and any portion of the FAA TRACON facility by Phoenix personnel, or its designated contractor, will be followed.

**SECTION VIII**  
**EXECUTION OF MOA IN COUNTERPARTS**

This MOA may be executed in counterparts, each of which will be deemed an original and attached to the final MOA.

**Remainder of Page Intentionally Left Blank. Signature Page to Follow.**

**CONCURRENCE BY PARTIES**

The FAA and the USERS agree with the provisions of this Amendment No. 2 as indicated by the signatures of their duly authorized officials. This Amendment No. 2 replaces any prior agreements.

**Federal Aviation Administration**

By: \_\_\_\_\_  
Phillip D. Thornton  
Air Traffic Manager, TWH-P50  
Phoenix TRACON

By: \_\_\_\_\_  
Steven Sherwood  
Phoenix OEP District Manager, AJW-WM  
Phoenix TRACON

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**City of Phoenix**

City of Phoenix, a municipal corporation  
David Cavazos, City Manager

\_\_\_\_\_  
Danny W. Murphy  
Aviation Director

Attest:

Date: \_\_\_\_\_

\_\_\_\_\_  
City Clerk

Approved as to Form:

\_\_\_\_\_  
Acting City Attorney

**City of Tempe**

\_\_\_\_\_  
Hugh Hallman  
Mayor

Attest:

Date: \_\_\_\_\_

\_\_\_\_\_  
City Clerk

Approved as to Form:

\_\_\_\_\_  
City Attorney

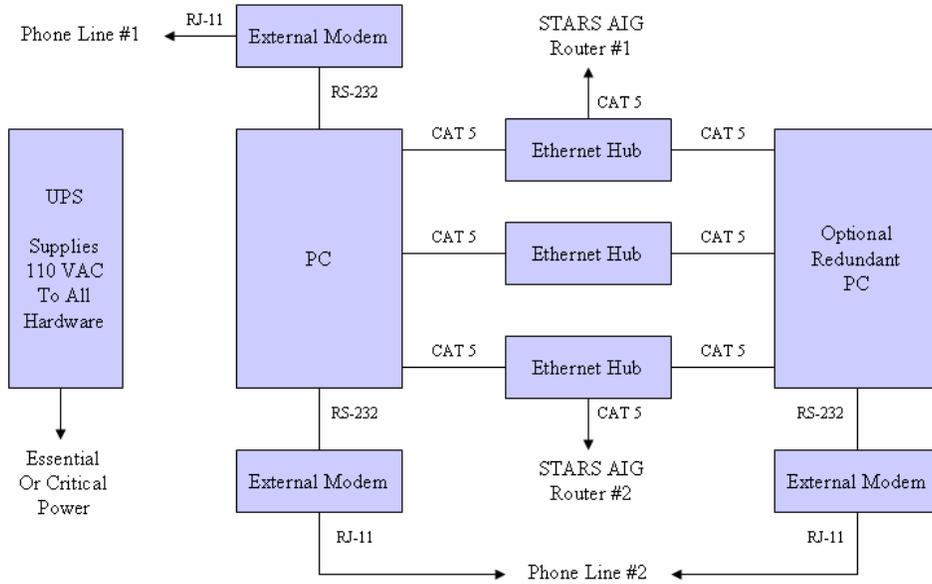
**Phoenix-Mesa Gateway Airport Authority**

\_\_\_\_\_  
Lynn Kusy, CM  
Airport Executive Director

Date: \_\_\_\_\_

# Appendix A

## ERA Corporation STARS Interface TRACON Hardware Block Diagram



## Appendix B

### Summary of Message Set being collected

Field Number	Field or Function	Description	No. of Bytes
00	MRT Timestamp	Timestamp provided by the Multi-Radar Tracker <b>Data Type:</b> Unsigned Integer [2 long words (32 bits each) expressing seconds (word 1) and microseconds (word 2) since 1/1/1970 (GMT UNIX Time)] <b>Range:</b> not applicable <b>Units:</b> not applicable <b>Precision:</b> 1 $\mu$ Sec	8
01	System Track Number	System Identifier for the track and associated data in this message <b>Data Type:</b> Unsigned Integer <b>Range:</b> 0 to 65535 0 – Flight Plan Data is for PENDING Flight Plan or pseudo track or unsupported flight <b>Units:</b> not applicable <b>Precision:</b> not applicable	2
02	System Flight Plan Number (SFPN)	STARS Flight Plan Index <b>Data Type:</b> Unsigned Integer <b>Range:</b> 0 to 65535 0 – Flight plan data section invalid (track is unassociated) <b>Units:</b> not applicable <b>Precision:</b> not applicable	2
03	Track Status	Indicates the status of this track <b>Data Type:</b> Unsigned Integer <b>Enumeration:</b> 0 – Active Tracking 1, 2, 3 – Coasting 4 – Drop Track <b>Units:</b> not applicable <b>Precision:</b> not applicable	1
04	pad		3
05	System-plane X smooth position	System plane X-position, output of MRT <b>Data Type:</b> Unsigned Integer <b>Range:</b> 0 to 2097151 <b>Units:</b> 1/256 Nmi <b>Precision:</b> 1/256 Nmi	4
06	System-plane Y smooth position	System plane Y-position, output of MRT <b>Data Type:</b> Unsigned Integer <b>Range:</b> 0 to 2097151 <b>Units:</b> 1/256 Nmi <b>Precision:</b> 1/256 Nmi	4
07	Vertical Velocity smooth	The vertical velocity of the System Track <b>Data Type:</b> Signed Integer <b>Range:</b> -32768 to 32767 [LSB= $2^{-12}$ ft / $10^{-2}$ sec ] <b>Units:</b> $2^{-12}$ ft / $10^{-2}$ sec <b>Precision:</b> $2^{-12}$ ft / $10^{-2}$ sec	2

Field Number	Field or Function	Description	No. of Bytes
08	X Velocity smooth	Smoothed system plane X-velocity <b>Data Type:</b> Signed Integer <b>Range:</b> -2 Nmi/sec to 2 Nmi/sec <b>Units:</b> 1/16384 Nmi per second <b>Precision:</b> 1/16384 Nmi/sec	2
09	Y Velocity smooth	Smoothed system plane Y-velocity <b>Data Type:</b> Signed Integer <b>Range:</b> -2 Nmi/sec to 2 Nmi/sec <b>Units:</b> 1/16384 Nmi per second <b>Precision:</b> 1/16384 Nmi/sec	2
10	Frozen Track	Indicates a sub status of this track <b>Data Type:</b> Unsigned Integer <b>Enumeration:</b> 0 – not frozen, 1 – frozen <b>Units:</b> not applicable <b>Precision:</b> not applicable	1
11	New Track	Indication of new track <b>Data Type:</b> Binary <b>Enumeration:</b> 0 - no, 1 - yes <b>Units:</b> not applicable <b>Precision:</b> not applicable	1 bit
12	Pseudo Track	Indication track is a pseudo track or unsupported flight <b>Data Type:</b> Binary <b>Enumeration:</b> 0 – no, 1 – yes <b>Units:</b> not applicable <b>Precision:</b> not applicable <b>Note:</b> System track number (field 01) will be set to 0 for pseudo tracks and unsupported flights	1 bit
13	pad		6 bits
14	Reported Beacon Code (SSR)	The target's beacon code reported by the secondary radar [12-bit octal SSR code] <b>Data Type:</b> Unsigned Integer <b>Range:</b> 0-7777 (base 8), 100000 (base 8) = No reported code <b>Units:</b> not applicable <b>Precision:</b> not applicable	2
15	Reported Altitude	Reported Mode C altitude, barometric pressure corrected <b>Data Type:</b> Signed Integer <b>Range:</b> -4000 to 4000 8000 HEX= invalid altitude <b>Units:</b> 25 ft <b>Precision:</b> 25 ft	2
16a	Scratch Pad 1	Contents of scratchpad 1 (Uncontrolled, free text. This field should not be used to obtain mission critical data.) <b>Data Type:</b> ASCII (left justified, trailing blank filled) <b>Range:</b> not applicable <b>Units:</b> not applicable <b>Precision:</b> not applicable	3

Field Number	Field or Function	Description	No. of Bytes
16b	Scratch Pad 2	<p>Contents of scratchpad 2</p> <p>(Uncontrolled, free text. This field should not be used to obtain mission critical data.)</p> <p><b>Data Type:</b> ASCII (left justified, trailing blank filled)</p> <p><b>Range:</b> not applicable</p> <p><b>Units:</b> not applicable</p> <p><b>Precision:</b> not applicable</p>	3
16c	pad		2
16d	Controller Position Symbol	<p>Unique alphanumeric symbol that identifies the controller position that is controlling an aircraft</p> <p><b>Data Type:</b> ASCII (left justified, trailing blank filled)</p> <p>(e.g., "1R")</p> <p><b>Enumeration:</b></p> <p>Allowable values for a given facility are set in adaptation. For aircraft unassociated with a flight plan or uncontrolled aircraft, the field will be set to ASCII null characters (i.e., binary zeroes).</p> <p><b>Units:</b> not applicable</p> <p><b>Precision:</b> not applicable</p>	2
17	Runway Assigned	<p>Assigned Runway, valid only at sites that place the assigned runway in the scratch pad. If the site has adapted the use of Scratch Pad 2, then this field will contain the contents of Scratch Pad 2. Otherwise, it will contain the contents of Scratch Pad 1.</p> <p><b>Data Type:</b> ASCII</p> <p><b>Range:</b> not applicable</p> <p><b>Units:</b> not applicable</p> <p><b>Precision:</b> not applicable</p>	3
18	pad		1
19	Assigned Beacon Code (SSR)	<p>Assigned SSR code</p> <p>[12-bit octal SSR code]</p> <p><b>Data Type:</b> Unsigned Integer</p> <p><b>Range:</b> 0-7777 (base 8),</p> <p>100000 (base 8) = No assigned code</p> <p><b>Units:</b> not applicable</p> <p><b>Precision:</b> not applicable</p>	2
20	Requested Altitude	<p>Requested altitude, as in Inter Facility message or in departure track</p> <p><b>Data Type:</b> Signed Integer</p> <p><b>Range:</b> -1000 to 1000</p> <p><b>Units:</b> 100 ft</p> <p><b>Precision:</b> 100 ft</p>	2
21	Aircraft Category	<p>Aircraft Category, as displayed to the controller in the STARS data block</p> <p><b>Data Type:</b> ASCII</p> <p><b>Enumeration:</b></p> <p>"H" – heavy,</p> <p>"T" – TCAS,</p> <p>"B" – heavy TCAS,</p> <p>"F" – B757,</p> <p>"L" – B757 TCAS,</p> <p>"V" – VFR,</p> <p>"W" – VFR and heavy jet,</p> <p>"U" – VFR on top and heavy jet.</p> <p>Additional values for a given facility may be set in adaptation.</p> <p><b>Units:</b> not applicable</p> <p><b>Precision:</b> not applicable</p>	1
22	pad		1

Field Number	Field or Function	Description	No. of Bytes
23	Aircraft ID (ACID)	Aircraft Identifier <b>Data Type:</b> ASCII (left justified, trailing blank filled) <b>Range:</b> not applicable <b>Units:</b> not applicable <b>Precision:</b> not applicable Note: The last character is always blank for flight plans received via IFDT messages	8
24	Type of Aircraft	Type of Aircraft <b>Data Type:</b> ASCII (left justified, trailing blank filled) (e.g. "DC10") <b>Range:</b> not applicable <b>Units:</b> not applicable <b>Precision:</b> not applicable	4
25	Entry Fix	Flight Plan Assigned Entry Fix <b>Data Type:</b> ASCII (left justified, trailing blank filled) <b>Range:</b> not applicable <b>Units:</b> not applicable <b>Precision:</b> not applicable Note: Coordination fix IDs are restricted to 3 characters for flight plans received via IFDT messages, and the last two characters are blank-filled.	5
26	Exit Fix	Flight Plan assigned Exit Fix <b>Data Type:</b> ASCII (left justified, trailing blank filled) <b>Range:</b> not applicable <b>Units:</b> not applicable <b>Precision:</b> not applicable Note: Coordination fix IDs are restricted to 3 characters for flight plans received via IFDT messages, and the last two characters are blank-filled.	5
27	Airport	ICAO code for the Origin or Destination airport <b>Data Type:</b> ASCII (left justified, trailing blank filled) <b>Range:</b> not applicable <b>Units:</b> not applicable <b>Precision:</b> not applicable Note: The last character is always blank for flight plans received via IFDT messages, and the ICAO country indicator ("K") is not present	4
28	Flight Rules	Aircraft Flight Rules <b>Data Type:</b> ASCII <b>Enumeration:</b> "V" – VFR "P" – VFR on Top "E" – Enroute IFR Any other character than those above – Denotes IFR, the actual character is site-adapted <b>Units:</b> not applicable <b>Precision:</b> not applicable	1
29	Type of Flight	An Arrival, Departure, or Enroute flight <b>Data Type:</b> ASCII <b>Enumeration:</b> "A" – Arrival, "P" – Departure, "E" – Enroute <b>Units:</b> not applicable <b>Precision:</b> not applicable	1

Field Number	Field or Function	Description	No. of Bytes
30	PTD Time	Planned Time of Departure or coordination time Field contains valid Planned Time of Departure for Departure flights only; contains coordination time for Arrival flights only. <b>Data Type:</b> ASCII <b>Range:</b> "00" to "23" for hours, "00" to "59" for minutes (hhmm) <b>Units:</b> not applicable <b>Precision:</b> 1 minute	4
31	Flight Plan Status	Flight Plan Status <b>Data Type:</b> Binary <b>Enumeration:</b> 000 – Pending 001 – Active 010 – Terminated <b>Units:</b> not applicable <b>Precision:</b> not applicable	3 bits
32	Delete Flight Plan	Delete flight plan and associated data <b>Data Type:</b> Binary <b>Enumeration:</b> 0 – no, 1 – yes <b>Units:</b> not applicable <b>Precision:</b> not applicable	1 bit
33	Flight Plan Suspended	Flight Plan sub status <b>Data Type:</b> Binary <b>Enumeration:</b> 0 – Not suspended 1 – Suspended <b>Units:</b> not applicable <b>Precision:</b> not applicable	1 bit
34	pad		3 bits
35	Enroute Computer ID (ECID)	Enroute Computer Identification associated with the flight plan. <b>Data Type:</b> ASCII <b>Enumeration:</b> Two digits followed by a digit or an alphabetic character. "I" and "O" are not used. An ECID of "FFF" is received in TZ messages when the ECID is unavailable. <b>Units:</b> not applicable <b>Precision:</b> not applicable	3
		Total	92 bytes

**NAS Data Release Request**

OMB Approved 2120-0668

**Paperwork Reduction Act Statement: This data is collected to assess the validity of your request for approval/disapproval. It will take approximately 27 hours or less to complete this form. The collection is mandatory, and all information collected shall be kept confidential. An agency may not collect, and a person is not required to respond to an information collection, unless it displays a currently valid OMB Control Number.**

1. Business/Organization Name  City of Phoenix Aviation Department- Phoenix Sky Harbor Intl Airport		2. Business Phone Number  602-273-4300	
3. Address (Street, City, State, ZIP Code)  3400 E Sky Harbor Blvd. Ste 3300, Phoenix, AZ 85034			
4. Point of Contact (POC) Name  James Davies	5. Phone Number  602-273-4300	6. Full E-mail address  james.davies@phoenix.gov	
7. Are you currently receiving NAS data? Yes <input checked="" type="checkbox"/> No (If no, skip to #10)			
8. Indicate your authority to access NAS data: <input checked="" type="checkbox"/> Memorandum of Agreement Government contract  (Attach documentation) Other (Explain)			
9. Indicate if you have an approved NCP(s) on file: Yes <input checked="" type="checkbox"/> No If yes, list the case file number(s):  NAS-IC-21059204-01C			
10a. Type of data you are requesting: <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Recorded 10b. Describe the data requested: (Attach additional sheets) <i>Phoenix TRACON shall provide Phoenix Sky Harbor Intl Airport (PHX) authority to utilize data that is processed by the ATC radar system computer at Phoenix TRACON.</i>			
11. Describe your proposed method for acquiring data: (Attach additional sheets) The system will include a primary and a backup data collection PC with peripherals. Both PCs will collect, process, and filter STARS data but only the primary PC will age and transfer the data to PHX's Noise Office. The backup PC will provide processed data in the event that the data is unusable on the primary PC and is capable of taking over the aging and transferring process if necessary. Data will be filtered and aged in compliance with the MOA between PHX and the FAA.			
12. Describe the nature of your organization/business and the purpose for this request. (Attach additional sheets) <i>The City of Phoenix owns and operates three airports: Phoenix Sky Harbor Intl (PHX), Phoenix Deer Valley (DVT), and Phoenix Goodyear (GYR). The data covered under this request is an integral component of Phoenix Sky Harbor's Noise and Flight Tracking Monitoring System that was an approved element of a FAR Part 150 Noise Compatibility Program. Since its installation, the noise and flight track information has aided airport staff in answering several thousand noise complaints and verifying flight track information.</i>			
13. Describe your sensitive data filtering process. (Attach additional sheets) <i>Flight track data for general and commercial aircraft operating under VFR and IFR, 24 hours/day within a 40 nautical mile radius of PHX, with an upper-tracking threshold of 23,000 feet above mean sea level. Data for Phoenix Sky Harbor Intl Airport (PHX), Phoenix Goodyear (GYR), Phoenix Deer Valley (DVT), and other local airports will be aged and filtered by PHX's system in accordance with FAA Order 1200.22; and transmitted to PHX for further processing in NFTMS.</i>			
14. List any non- U.S. citizen personnel you will employ for this data request. Explain his/her duties in relation to this data request. (Attach additional sheets)  None.			
<b>FOR OFFICE USE ONLY: Request Date:</b> ___/___/___		<b>Package Date:</b> ___/___/___	
<b>Issue Date:</b> ___/___/___		<b>Review Date:</b> ___/___/___	