



City of Chicago



F2014-105

Office of the City Clerk

Document Tracking Sheet

Meeting Date:	12/10/2014
Sponsor(s):	Dept./Agency
Type:	Communication
Title:	O'Hare Modernization Program, Establishment of NAVAID's and LLWAS Relocation for new Runway 10R-28L - Completion Phase 2A
Committee(s) Assignment:	



CHICAGO DEPARTMENT OF AVIATION
CITY OF CHICAGO

October 30, 2014

The Honorable Susana A. Mendoza
Office of the City Clerk
121 North LaSalle Street, Room 107
Chicago, Illinois 60602

Subject: O'Hare Modernization Program
Agreement with Federal Aviation Administration
Ref: WBS OH.6135.000.30.B.1.cc
OMP-CL-OTH-0025

Dear Ms. Mendoza:

Transmitted herewith is a copy of the following document:

- AJW-FN-CSA-13-C155 Establishment of NAVAIDs and LLWAS Relocation for new Runway 10R-28L at O'Hare International Airport – OMP Completion Phase 2A

This agreement was executed by the Chief Operating Officer of the Department of Aviation/O'Hare Modernization Program and is being forwarded to you pursuant to applicable ordinances. Please put this document on file in your office and make it available to members of the public who may wish to review it in accordance with your customary practices.

Sincerely,

Jessica Sampson
General Counsel, CDA

Enclosure: 1. AJW-FN-CSA-13-C155 Establishment of NAVAIDs and LLWAS Relocation for new Runway 10R-28L at O'Hare International Airport – OMP Completion Phase 2A (17 pages) executed 3/26/2014

cc: J. Leach, CDA
A. Garcia, CDA
B. Boratyn, CDA
Document Control

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NON-FEDERAL REIMBURSABLE AGREEMENT

BETWEEN

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

AND

**CITY OF CHICAGO
O'HARE MODERNIZATION PROGRAM
CHICAGO, ILLINOIS**

WHEREAS, the Federal Aviation Administration (FAA) can furnish directly or by contract, material, supplies, equipment, and services which the City Of Chicago, O'Hare Modernization Program (OMP) (Sponsor) requires, has funds available for, and has determined should be obtained from the FAA;

WHEREAS, it has been determined that competition with the private sector for provision of such material, supplies, equipment, and services is minimal; the proposed activity will advance the FAA's mission; and the FAA has a unique capability that will be of benefit to the Sponsor while helping to advance the FAA's mission;

WHEREAS, the authority for the FAA to furnish material, supplies, equipment, and services to the Sponsor upon a reimbursable payment basis is found in 49 U.S.C. § 106(l)(6) on such terms and conditions as the Administrator may consider necessary;

NOW THEREFORE, the FAA and the Sponsor mutually agree as follows:

ARTICLE 1. Parties

The Parties to this Agreement are the FAA and City Of Chicago, OMP.

ARTICLE 2. Type of Agreement

This Agreement is an "other transaction" authorized under 49 U.S.C. § 106(l)(6). It is not intended to be, nor will it be construed as, a partnership, corporation, joint venture or other business organization.

ARTICLE 3. Scope

- A. The purpose of this Agreement between the FAA and the Sponsor is for the Establishment of Nav aids for new runway 10R-28L, O'Hare International Airport, Chicago, Illinois. This Agreement provides funding for the FAA to provide these services.

The following facilities will be established to support the new Runway 10R and Runway 28L precision instrument approaches:

1. Localizer (LOC), glide slope (GS), inner marker (IM), far field monitor (FFM), and High Intensity Approach Lighting System with Sequenced Flashers (ALSF-2) for each approach.
2. A single Distance Measuring Equipment (DME) to serve both approaches.
3. Three Runway Visual Range (RVR) Visibility Sensors (VS's) and Runway Light Intensity Monitor (RLIM).

This Agreement provides funding for the FAA to establish these services. Therefore, this Agreement is titled:

Establishment of NAVAIDs and LLWAS Relocation for new Runway 10R-28L at O'Hare International Airport – OMP Completion Phase 2A

B. The FAA will perform the following activities:

1. Equipment and Material Provisioning Responsibilities
 - a. For the new Runway 10R and 28L ILS installations, the FAA will install ILS equipment with funding provided by the Sponsor.
 - b. For the new Runway 10R and 28L ALSF-II's, the Sponsor will provide funding for the FAA to procure engine generator systems. This item includes the FAA procuring and delivering two (2) 250 kW engine generators with transfer switches and other necessary support items for the 10R and 28L ALSF/LOC shelters to support the new runway.
 - c. The FAA will furnish engine generator remote start kits for installation by the Sponsor.
 - d. For the new Runway 10R and 28L ALSF-II's, the FAA will provide silicone rubber insulator disks (gaskets) for the PAR-56 steady-burning light assemblies for installation by the sponsor.
 - e. Sponsor will provide funding for FAA to procure LLWAS poles for stations 14 (relocated site) and 21 (new site).
 - f. FAA will remove LLWAS equipment from old station 14 after the new site is commissioned.
2. Construction Responsibilities
 - a. The FAA will provide construction oversight for Runway 10R-28L NAVAIDs and LLWAS sites in addition to Runway 14R Rollout RVR relocation as part of Taxiway K and L project.
3. Electronics Installation Responsibilities:
 - a. **LOCALIZER, INNER MARKER, FFM, DME, AND ALSF-II**

Unless specified otherwise, for each approach to Runway 10R-28L :

- 1) Install localizer equipment in the ALSF-II/localizer shelter.
- 2) Terminate coaxial and control cables, which have been pulled in duct bank by the Sponsor at localizer antenna and equipment shelter locations.
- 3) Install the FFM equipment in the ALSF-II/localizer shelter.
- 4) Terminate FFM coaxial cables, which have been pulled in duct by the Sponsor.
- 5) Install IM equipment in the ALSF-II/localizer shelter and along the extended centerline of the runway.
- 6) Terminate IM coaxial cables, which have been pulled in duct by the Sponsor.
- 7) Install DME equipment in the Runway 10R/ALSF-II/28L localizer shelter.
- 8) Install DME antenna on the antenna mount near the Runway 28L ALSF-II/10R localizer shelter.
- 9) Complete installation and check out requirements for the DME system.
- 10) Install remote control cabling between FOTS equipment and localizer, IM, DME and ALSF-II equipment.
- 11) Tune-up, ground check, and flight check the localizer.
- 12) Conduct continuity-of-service monitoring and record-keeping of the burn-in period.
- 13) Participate in test of engine generator remote start kit.
- ~~14) Install and test ALSF-II remote controls in the control tower (ATCT) .~~
- 15) Participate in testing and tune-up of ALSF-II equipment.
- 16) Flight check the IM, DME, and ALSF-II.
- 17) Commission the localizer, IM, DME, and ALSF-II.

b. GLIDE SLOPE (GS)

Unless specified otherwise, for each approach to Runway 10R-28L :

- 1) Terminate GS antenna coaxial cables.
- 2) Install fiber optic electronic equipment and equipment racks.
- 3) Install GS electronic equipment.
- 4) Tune and flight check the glide slope.
- 5) Conduct continuity-of-service monitoring and record-keeping of the burn in period.
- 6) Commission the GS.

c. RVR VS and Runway Light Intensity Monitor (RLIM)

For each of the three Runway Visual Range (RVR) Visibility Sensors (VS's) :

- 1) Terminate control cables.
- 2) Install sensor hardware.

- 3) Calibrate and test the RVR VS's.
- 4) Terminate control cables for relocated Runway 14R Rollout RVR site as part of Taxiway K and L project.
- 5) Install sensor hardware for relocated Runway 14R Rollout RVR site.
- 6) Calibrate and test the RVR VS for Runway 14R Rollout RVR site.

4. Environmental Responsibilities:

- a. Review the Acquisition Environmental Due Diligence Audit (EDDA) for the new facility to ensure it meets FAA requirements.
- b. Perform the Termination EDDA for the decommissioned equipment.
- c. Coordinate National Environmental Policy Act (NEPA) requirements.
- d. The FAA agrees to remediate, at its sole cost, all hazardous substance contamination on the existing leased premises that is found to have occurred as a direct result of the NavAids/LLWAS equipment included in this agreement, subject to the availability of funds.

5. Property Lease Responsibilities:

- a. Submit a request to the Sponsor to add the new NavAids and LLWAS facilities to the master license.

6. Property Transfer Responsibilities:

- a. Property transfers will be in accordance with Article 6 of this Agreement.

7. Other Responsibilities:

- a. Provide a resident engineer for the duration of the project to ensure that the construction of NavAids/LLWAS facilities are completed in accordance with FAA standards.
- b. Develop required new approach charts, if required.
- c. Review and approve the "as-built" drawings of the Sponsor's construction contractor.
- d. Provide FAA certification to enable runway construction work to be checked.
- e. Coordinate flight checks to meet Sponsor's scheduled commissioning dates.
- f. Perform disposition of removed equipment and capitalization of new assets.

C. The Sponsor will perform the following activities:

1. The Sponsor shall fund the actual cost of engineering by Sponsor and FAA, materials, and construction for the new NAVAIDS facilities, FOTS cable termination; and FAA labor required for electronics equipment and antenna installation for all required facilities, and all required FAA flight checks. This includes FAA installation contract labor.

2. The Sponsor shall provide funding for the FAA to procure Thales Mark-20A ILS systems, DME, and RVR for Runway 10R-28L.
3. The Sponsor shall fund hazardous material remediation as identified in Paragraph Number 9 below, Environmental Responsibilities.
4. The Sponsor understands and agrees that any relocation, replacement, or modification of any existing or future FAA facility covered by this Agreement during its term, or any facility removal made necessary by airport improvements or changes which in the FAA's opinion interfere with the technical and/or operational characteristics of the FAA facility, will be at the expense of the Sponsor. If such relocations, replacements, or modifications are necessitated due to causes not attributable to either the Sponsor or the FAA, funding responsibility shall be determined by the FAA.
5. The Sponsor shall provide funding to cover the cost of the Sponsor's and the FAA's resident engineer(s) for the projects listed in Paragraph Number 7 below, Construction and Installation Responsibilities.
6. The Sponsor shall provide funding to the FAA for the FAA to procure:
 - a. Silicone rubber insulator disks (gaskets) for the ALSF-II PAR-56 steady-burning light assemblies.
 - b. Cable connectors and miscellaneous equipment for FAA electronic installation.
7. Construction and Installation Responsibilities:

a. LOCALIZER, INNER MARKER, FFM, DME, AND ALSF-II

Unless specified otherwise, for each approach to Runway 10R-28L the Sponsor is responsible for the following:

- 1) Construct a shelter, including its foundation, to house an ALSF-II regulator substation, localizer, inner marker, far field monitor, an engine generator system, and, in the Runway 10R ALSF-II/Runway 28L localizer shelter only, DME equipment.
- 2) Provide Commonwealth Edison Co. (CECO) electrical service to the shelter.
- 3) Install and test the ALSF-II engine generator system (EGS) equipment furnished by the Sponsor, consisting of engine generator, automatic transfer and bypass switch, day tank, load bank, and muffler that is currently in storage at the FAA warehouse in Elk Grove Village. Also install the engine generator remote start kit provided by the FAA.
- 4) Furnish and install underground fuel storage tanks.
- 5) Furnish (including spares), install, and test Type FA-10700 ALSF-II equipment (NBP Corp.). This item includes providing an on-site ALSF-II

factory representative for ALSF-II start-up testing, tune-up, and initiation of operation. Spare equipment inventory will be allocated to O'Hare Airport and immediately accessible for local use when needed. Any spares used during construction will be replaced by the Sponsor.

- 6) Construct ALSF-II light lane, including all light support structures and their foundations, duct banks, cabling, crushed rock walkways and other appurtenances. Furnish and install all construction materials and equipment required for the light lane, except the silicone rubber insulator disks for the PAR-56 lamp assemblies. Those disks will be furnished by the FAA but funded and installed by the Sponsor.
- 7) Construct foundations, assemble, and install the 20-element localizer antenna arrays provided from Sponsor funds.
- 8) Install duct bank and cables from the localizer antenna array to the ALSFII/localizer shelter. Termination of cables in shelter shall be by others.
- 9) Construct far field monitor (FFM) antenna mount foundation, duct and cable from ALSF-II shelter to FFM antenna mount cable junction box. Install the FFM antenna provided by the FAA with Sponsor funds.
- 10) Construct inner marker (IM) antenna mount foundation, duct and cable from ALSF-II shelter to IM antenna mount junction box. Install the IM antenna provided by the Sponsor.
- 11) Construct DME antenna mount foundation, and duct and cable from ALSF-II shelter to DME antenna mount foundation. DME antenna installation by the FAA.
- 12) Construct access road and maintain site access during construction.

b. GLIDE SLOPE (GS)

For each approach to Runway 10R-28L:

- 1) Construct a shelter, including its foundation, to house glide slope and RVR equipment.
- 2) Construct foundation for GS antenna tower, and install antenna tower, tower appurtenances, and antennas.
- 3) Install conduits between GS antenna tower and GS shelter.
- 4) Provide electrical service to shelter in accordance with "Dallas Power Model" where Glide slope power is derived from the ALSF shelter site with its associated back-up EG.
- 5) Provide ducts for FOTS cable from FOTS manhole at site, to shelter, and pull FOTS cable from FOTS manhole at site, to shelter.
- 6) Construct site access road and maintain site access during construction.
- 7) Pave GS reflective path snow removal areas unless pavement is deleted by OMP scope management committee.

c. RUNWAYS 10R AND 28L TOUCHDOWN RVR Visibility Sensor (VS) SITES

For each VS site:

- 1) Construct foundations for RVR VS tower, tower support stand, and VS power and control stand. Construct RVR VS tower and VS power and control stand.
- 2) Construct underground conduit between VS tower and VS power and control stand, and install cables.
- 3) Construct underground ducts to VS power and control stand from adjacent glide slope shelter, and install power and control cables in them.
- 4) Construct maintenance walkway area.

d. RUNWAY 10R MID-POINT RVR VS SITE

- 1) Construct foundations for RVR VS tower and VS power and control stand. Construct RVR VS tower and VS power and control stand.
- 2) Construct underground conduit between VS tower and VS power and control stand, and install cables.
- 3) Provide Commonwealth Edison Co. (CECO) electrical service to the VS power and control stand.
- 4) Construct underground duct connection to existing CECO ductbank for VS power and control stand from the Runway 10R glide slope shelter, and install control cable in it.
- 5) Construct maintenance walkway area.

8. Electronic Installation Responsibilities:

- a. The Sponsor has no electronic installation responsibilities.

9. Environmental Responsibilities:

- a. Provide all Environmental Studies necessary to accomplish the work listed in this Memorandum of Agreement (MOA) . The Environmental Studies shall be in accordance with all federal, state, and local regulations and FAA Orders. Provide Phase I, Environmental Due Diligence Audit (EDDA), documentation for new facility lease areas. Environmental Studies must be completed and reviewed by the FAA prior to the commencement of any construction. Provide Phase II and Phase III Environmental Studies as required by federal, state, and local regulations, FAA Orders, and as deemed necessary by the FAA. Environmental Studies shall, at a minimum, document the source and extent of any petroleum products or hazardous material impacts to the environment. The Sponsor agrees to investigate and remediate, at its sole cost, all petroleum or hazardous material impacts prior to construction and FAA lease acceptance.
- b. Certify the use of environmentally preferable products and services for construction within reasonable costs and availability . "Environmentally preferable" means products or services that have a lesser or reduced effect on

human health and the environment when compared with competing products or services that serve the same purpose. The Sponsor also certifies that no asbestos-containing materials will be used during the construction of any facility.

- c. Fund all activities and equipment costs related to managing water on the airport due to contamination caused by non-FAA installation. Costs include but are not limited to pumping excess water from manholes prior to pulling cable, transporting any water contaminated with hazardous substances such as deicing fluid, jet fuel, oil and grease, and disposing of any contaminated water identified during construction.
- d. Provide City/State/County environmental expertise and clean-up crews in case any hazardous material is encountered during construction or maintenance of the new facility.

10. Other Responsibilities:

- a. Provide copies of all critical shop drawings, as required.
- b. Provide all appropriate documentation on make/models numbers and manuals on all systems installed, as required.
- c. Provide photographs, paper or digital, of construction items as requested by the FAA.
- d. During the course of construction, provide progress reports to the FAA. These reports shall be emailed on a weekly basis and shall include that week's progress, photos of work accomplished, and activities planned for the next week.
- e. Participate in a mutual or joint inspection of the facility and prepare a plan for the correction of any items that are identified as not acceptable by the FAA. If the Sponsor's contractor will correct these items, the Sponsor will be responsible for payment to their contractor(s). If the FAA completes these corrections, the FAA will be reimbursed by the Sponsor.
- f. Sponsor will provide the FAA three sets of, as-built drawings in hard copy format and one set in electronic format. The as-built drawings will be delivered no later than 60 days from project completion. The requirement for as-built drawings and submittal of real and personal property data to the FAA shall be in accordance with the milestones established in the Project Plans and Specifications. The as-builts will include metes-and bounds legal descriptions based on the land surveys performed on each facility, restricted critical area, site access, road, and cable route associated with the project.

D. This agreement is in whole or in part funded with funding from an AIP grant [] Yes
[X] No. If Yes, the grant date is: _____ and the grant number is:

ARTICLE 4. Points of Contact

A. FAA:

1. The Technical Operations Central Services Area will perform the scope of work included in this Agreement. . Jeff Page is the FAA Technical Officer and liaison with the Sponsor and can be reached at (847) 294-7343. This liaison is not authorized to make any commitment, or otherwise obligate the FAA, or authorize any changes which affect the estimated cost, period of performance, or other terms and conditions of this Agreement.
2. FAA Contracting Officer: The execution, modification, and administration of this Agreement must be authorized and accomplished by the Contracting Officer, Irene Medina who can be reached at (847) 294-8309.

B. Sponsor:

Mr. Frank Grimaldi
Assistant Commissioner
City of Chicago — O'Hare Modernization Program
10510 W. Zemke Road
Chicago, IL 60666
Phone: (773) 686-6478
Fax: (773) 686-6227

ARTICLE 5. Non-Interference with Operations

The Sponsor understands and hereby agrees that any relocation, replacement, or modification of any existing or future FAA facility, system, and/or equipment covered by this Agreement during its term or any renewal thereof made necessary by Sponsor improvements, changes, or other actions which in the FAA's opinion interfere with the technical and/or operations characteristics of an FAA facility, system, and/or piece of equipment will be at the expense of the Sponsor, except when such improvements or changes are made at the written request of the FAA. In the event such relocations, replacements, or modifications are necessitated due to causes not attributable to either the Sponsor or the FAA, the parties will determine funding responsibility.

ARTICLE 6. Property Transfer

- A. To the extent that the Sponsor provides any material associated with the Project, and to the extent that performance of the requirements of this Project results in the creation of assets constructed, emplaced, or installed by the Sponsor, all such material and assets will become the property of the FAA upon project completion. For purposes of this Article 6, "project completion" means that FAA has inspected the equipment or construction, and has accepted it as substantially complete and ready for use. The sponsor shall enter into a transfer agreement with the FAA for conveyance

of ownership. The Sponsor and the FAA acknowledge that the FAA has accepted the fundamental responsibilities of ownership by assuming all operation and maintenance requirements for all property transferred to the FAA, and the subject transfer to FAA is in the best interest of both the Sponsor and the FAA.

The costs incurred in procurement of the real and personal property being transferred, to include both design and construction costs, shall be supported by an Attachment A (Sponsor Cost and Transfer Certification Form) executed by the Sponsor and FAA. Real property descriptions shall include the name of the asset (building, tower, fence, etc), its composition (metal, brick, fiberglass, etc.) and its dimensions (L x W, Height, Capacity, etc.). Personal property descriptions will show the system/component being transferred along with the model number and/or capacity.

- B. In order to ensure that the assets and materials subject to this Article remain fully accounted-for and operational, the Sponsor will provide the FAA any additional documents and publications that will enhance the FAA's ability to manage, maintain and track the assets being transferred. Examples may include, but are not limited to, operator manuals, maintenance publications, warranties, inspection reports, etc. These documents will be considered required hand-off items upon Project completion.

ARTICLE 7. Estimated Costs

The estimated FAA costs associated with this Agreement are as follows:

COST ESTIMATE - Design Review of NAVAIDS for new Runway 10R-28L at O'Hare International Airport – OMP Completion Phase 2A: O'Hare International Airport in Chicago, Illinois	
Description of Reimbursable Item	Estimated Cost
FAA Labor Costs	
Construction Oversight (WB4050)	\$500,000.00
Plants Engineering (WB4020, WB4050)	\$100,000.00
Electronics Engineering (WB4020, WB4050)	\$200,000.00
Electronic Installation (WB4060)	\$600,000.00
Warehouse/Staging Area Support (WB4050)	\$50,000.00
OMP Phase 2A: Labor Administrative Overhead Waived	\$0
Labor Sub Total	\$1,450,000.00
FAA Non-Labor Costs	
Design Costs	
Drafting (WB4020)	\$75,000.00
Environmental/EOSH Engineering Support (WB4030)	\$100,000.00
Sub Total	\$175,000.00
NAVAIDS Material Costs	

ALSF-2 Silicone Rubber Insulator Disks (10R)	\$5,000.00
ALSF-2 Silicone Rubber Insulator Disks (28L)	\$5,000.00
ALSF-2 Equipment/Material	\$35,000.00
Schedule A & B Equipment	\$60,000.00
Test Equipment	\$20,000.00
Cores/Padlocks for NAVAIDS Shelters	\$6,000.00
Localizer Antenna Snow Covers	\$24,000.00
Inner Marker Pedestals	\$10,000.00
Re-Tune FFM	\$2,500.00
DME Obstruction Light	\$580.00
RMM Circuits, ORD to ZAU (3 Circuits)	\$15,000.00
Circuit Card Replacement Repair (FAA Depot)	\$10,000.00
Installation Material	\$35,000.00
Flight Inspection (124 hours)	\$350,000.00
Sub Total	+\$578,080.00
FAA Utility Cost at Time of BOD for 18 Months	
10R Localizer	\$15,000.00
10R ALSF-2	\$35,000.00
10R Glide Slope	\$10,000.00
28L Localizer	\$15,000.00
28L Inner Marker	\$10,000.00
28L ALSF-2	\$35,000.00
28L Glide Slope	\$10,000.00
Sub Total	\$130,000.00
EG Costs	
Generator, 250REOZJE, CLIN 0001E (2 each)	\$88,936.00
ATS, KBL-BMVA-0600S, CLIN 0012D (2 each)	\$43,796.00
Loadbank, 354735, CLIN 0031J (2 each)	\$33,506.00
Daytank, UTRS-100, CLIN 0030T (2 each)	\$6,778.00
Muffler, PA-354809, CLIN 0032BF (2 each)	\$982.00
ATS Rear Bay Adapter, CLIN 0012D (2 each)	\$2,316.00
EG Remote Start (REIA)	\$10,000.00
Startup (2 each)	\$7,000.00
Transportation Cost (2 each)	\$6,000.00
Sub Total	\$199,314.00
LLWAS Stations 14 and 21 Costs	
LLWAS 14 Procure Anemometer	\$3,000.00
LLWAS 14 Procure/Install 120' Pole	\$70,000.00

LLWAS 14 Procure Electronics	\$20,000.00
Procure 2 Set of Anchor Rods/Templates	\$12,000.00
LLWAS 21 Procure Anemometer	\$3,000.00
LLWAS 21 Procure/Install 120' Pole	\$70,000.00
LLWAS 21 Procure Electronics	\$20,000.00
Removal/Disposal of existing LLWAS 14 pole	\$40,000.00
Sub Total	\$238,000.00
10R-28L NavAids Procurement Costs	
10R-28L LOC and 20 Element Array	\$661,914.00
Glide Slope	\$349,274.00
RMM Link Control Unit w/RMM Kits	\$21,260.00
Remote Control Status Unit (RSU)	\$12,430.00
Portable ILS Receiver (PIR)	\$31,560.00
Site Spares	\$135,866.00
ILS Test Equipment	\$61,326.00
Far Field Monitor	\$86,172.00
Inner Marker	\$81,352.00
Additional Spares for IM	\$14,556.00
Low Power DME	\$33,862.00
DME Spares	\$17,531.00
DME Directional Coupler	\$348.00
DME Power Meter	\$9,582.00
Proxy Agent, HW/SW/Licnsc	\$25,385.00
Visability Sensors (3 each)	\$43,548.00
VA Ferroresonant UPS with Isolation (#XPS2000)	\$3,340.00
Current Loop Sensors (2 each)	\$1,898.00
Sub Total	\$1,591,204.00
Non-Labor Administrative Overhead (6%)	
	\$174,695.88
Non-Labor Sub-Total	\$3,086,293.88
Grand Total	\$4,536,293.88

ARTICLE 8. Period of Agreement and Effective Date

The effective date of this Agreement is the date of the last signature. This Agreement is considered complete when the final invoice is provided to the Sponsor and a refund is sent or payment is received as provided for in Article 9, Section E of this Agreement. Under no circumstances will this Agreement extend five years beyond its effective date.

ARTICLE 9. Reimbursement and Accounting Arrangements

- A. The Sponsor agrees to prepay the entire estimated cost of the Agreement. The Sponsor will send a copy of the executed Agreement and full advance payment in the amount stated in Article 7 to the Accounting Division listed in Section C of this Article. The advance payment will be held as a non-interest bearing deposit. Such advance payment by the Sponsor must be received before the FAA incurs any obligation to implement this Agreement.
- B. The Sponsor certifies that arrangements for sufficient funding have been made to cover the estimated costs of the Agreement.
- C. The Accounting Division is identified by the FAA as the billing office for this Agreement. The Sponsor will send a copy of the executed Agreement and the full advance payment to the Accounting Division shown below. All payments must include the Agreement number, Agreement name, Sponsor name, and project location.

The mailing address is:

FAA Mike Monroney Aeronautical Center
Attn: AMK-323, Reimbursable Project Team
P.O. Box 25082
Oklahoma City, OK 73125

The overnight mailing address is:

FAA Mike Monroney Aeronautical Center
Attn: AMK-323, Reimbursable Project Team
6500 S. MacArthur Blvd.
Oklahoma City, OK 73169
Telephone: (405) 954-9585

The Sponsor hereby identifies the office to which the FAA will render bills for the project costs incurred as:

Mr. Michael Zonsius, CPA
Chief Financial Officer
Chicago Department of Aviation
10510 W. Zemke Road, PO Box 66142
Chicago, IL 60666
Phone: (773) 686-3433
Fax: (773) 686-6235

- D. The FAA will provide a quarterly Statement of Account of costs incurred against the advance payment.

- E. The cost estimates contained in Article 7 are expected to be the maximum costs associated with this Agreement, but may be modified to recover the FAA's actual costs. If during the course of this Agreement actual costs are expected to exceed the estimated costs, the FAA will notify the Sponsor immediately. The FAA will also provide the Sponsor a modification to the Agreement which includes the FAA's additional costs. The Sponsor agrees to prepay the entire estimated cost of the modification. The Sponsor will send a copy of the executed modification to the Agreement to the FAA-Mike Monroney Aeronautical Center with the additional advance payment. Work identified in the modification cannot start until receipt of the additional advance payment. In addition, in the event that a contractor performing work pursuant to the scope of this Agreement brings a claim against the FAA and the FAA incurs additional costs as a result of the claim, the Sponsor agrees to reimburse the FAA for the additional costs incurred whether or not a final bill or a refund has been sent.

ARTICLE 10. Changes and Modifications

Changes and/or modifications to this Agreement will be formalized by a written modification that will outline in detail the exact nature of the change. Any modification to this Agreement will be executed in writing and signed by the authorized representative of each party. The parties signing this Agreement and any subsequent modification(s) represent that each has the authority to execute the same on behalf of their respective organizations. No oral statement by any person will be interpreted as modifying or otherwise affecting the terms of the Agreement. Any party to this Agreement may request that it be modified, whereupon the parties will consult to consider such modifications.

ARTICLE 11. Termination

In addition to any other termination rights provided by this Agreement, either party may terminate this Agreement at any time prior to its expiration date, with or without cause, and without incurring any liability or obligation to the terminated party other than payment of amounts due and owing and performance of obligations accrued, in each case on or prior to the termination date, by giving the other party at least thirty (30) days prior written notice of termination. Payment of amounts due and owing may include all costs reimbursable under this Agreement, not previously paid, for the performance of this Agreement before the effective date of the termination; the total cost of terminating and settling contracts entered into by the FAA for the purpose of this Agreement; and any other costs necessary to terminate this Agreement. Upon receipt of a notice of termination, the receiving party will take immediate steps to stop the accrual of any additional obligations which might require payment. All funds due after termination will be netted against the advance payment and, as appropriate, a refund or bill will be issued.

ARTICLE 12. Order of Precedence

If attachments are included in this Agreement and in the event of any inconsistency between the attachments and the terms of this Agreement, the inconsistency will be resolved by giving preference in the following order:

- A. This Agreement
- B. The attachments

ARTICLE 13. Legal Authority

This Agreement is entered into under the authority of 49 U.S.C. § 106(l)(6), which authorizes the Administrator of the FAA to enter into and perform such contracts, leases, cooperative agreements and other transactions as may be necessary to carry out the functions of the Administrator and the Administration on such terms and conditions as the Administrator may consider appropriate. Nothing in this Agreement will be construed as incorporating by reference or implication any provision of Federal acquisition law or regulation.

ARTICLE 14. Disputes

Where possible, disputes will be resolved by informal discussion between the parties. In the event the parties are unable to resolve any dispute through good faith negotiations, the dispute will be resolved by alternative dispute resolution using a method to be agreed upon by the parties. The outcome of the alternative dispute resolution will be final unless it is timely appealed to the Administrator, whose decision is not subject to further administrative review and, to the extent permitted by law, is final and binding (see 49 U.S.C. § 46110).

ARTICLE 15. Warranties

The FAA makes no express or implied warranties as to any matter arising under this Agreement, or as to the ownership, merchantability, or fitness for a particular purpose of any property, including any equipment, device, or software that may be provided under this Agreement.

ARTICLE 16. Insurance

The Sponsor will arrange by insurance or otherwise for the full protection of itself from and against all liability to third parties arising out of, or related to, its performance of this Agreement. The FAA assumes no liability under this Agreement for any losses arising out of any action or inaction by the Sponsor, its employees, or contractors, or any third party acting on its behalf.

ARTICLE 17. Limitation of Liability

To the extent permitted by law, the Sponsor agrees to indemnify and hold harmless the FAA, its officers, agents and employees from all causes of action, suits or claims arising out of the work performed under this Agreement. However, to the extent that such claim is determined to have arisen from the act or omission by an officer, agent, or employee of the FAA acting within the scope of his or her employment, this hold harmless obligation will not apply and the provisions of the Federal Tort Claims Act, 28 U.S.C. § 2671, et seq., will control. The FAA assumes no liability for any losses arising out of any action or inaction by the Sponsor, its employees, or contractors, or any third party acting on its behalf. In no event will the FAA be liable for claims for consequential, punitive, special and incidental damages, claims for lost profits, or other indirect damages.

ARTICLE 18. Civil Rights Act

The Sponsor will comply with Title VI of the Civil Rights Act of 1964 relating to nondiscrimination in federally assisted programs.

ARTICLE 19. Protection of Information

The parties agree that they will take appropriate measures to identify and protect proprietary, privileged, or otherwise confidential information that may come into their possession as a result of this Agreement.

ARTICLE 20. Security

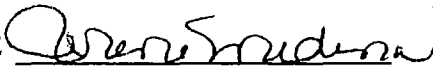
In the event that the security office determines that the security requirements under FAA Order 1600.72A applies to work under this Agreement, the FAA is responsible for ensuring that security requirements, including compliance with AMS clause 3.14-2, Contractor Personnel Suitability Requirements are met.

ARTICLE 21. Entire Agreement

This document is the entire Agreement of the parties, who accept the terms of this Agreement as shown by their signatures below. In the event the parties duly execute any modification to this Agreement, the terms of such modification will supersede the terms of this Agreement to the extent of any inconsistency. Each party acknowledges participation in the negotiations and drafting of this Agreement and any modifications thereto, and, accordingly that this Agreement will not be construed more stringently against one party than against the other. If this Agreement is not executed by the Sponsor within 120 calendar days after the FAA transmits it to the Sponsor, the terms contained and set forth in this Agreement shall be null and void.

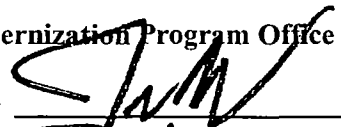
AGREED:

**FEDERAL AVIATION
ADMINISTRATION**

SIGNATURE 
NAME Irene Medina
TITLE Contracting Officer
DATE 3/27/14

CITY OF CHICAGO

O'Hare Modernization Program Office

SIGNATURE 
NAME John Hett
TITLE CPD
DATE 3/26/14

Replace this page with "Sponsor Cost Form" per Article 6. Form should be filled out as much as possible prior to execution of agreement for RCT team use.