Rutherford County

Rutherford County Office Building
289 N. Main Street
Rutherfordton, NC 28139

Meeting Agenda

Tuesday, June 16, 2015

5:30 PM

Rutherford County Airport Authority

I. Call To Order

II. Pledge of Allegiance

Agenda Approval

III. Public Comments

IV. Consent Agenda

Minutes of May 19, 2015 Regular Meeting

Attachments: 2015.05.19 Minutes

V. Financial Report

May Financial Report

Attachments: May Financial Report

VI. Airport Operations Report

VIII. New Business

Surplus-Tractor Tug

Attachments: Surplus-Tractor Tug

Surplus-Fire Apparatus

Attachments: Surplus-Fire Apparatus

Lease and Operations Agreement Skyhawk Aviation, LLC

Attachments: Skyhawk Lease and Operations Agreement

Work Authorization for Airport Layout Plan

Attachments: Work Authorization Airport Layout Plan

X. Adjourn

Agenda Summary Sheet

Rutherford County Office Building
289 N. Main Street
Rutherfordton, NC 28139

File #: ID 15-779, **Version:** 1

Meeting Date: June 16, 2015

Agenda Approval

Summary:
Agenda presented to the Board for consideration.

Budget:
n/a

Contact Information:
Brooke Watson
Secretary to the Airport Authority
828-287-6061
airport@rutherfordcountync.gov

Recommended Motion:
Approve agenda.

Agenda Summary Sheet

Rutherford County Office Building
289 N. Main Street
Rutherfordton, NC 28139

File #: ID 15-780, **Version:** 1

Meeting Date: June 16, 2015

Minutes of May 19, 2015 Regular Meeting

Summary:
Minutes of May 19, 2015 Regular Meeting are attached for the Board's consideration.

Budget:
n/a

Contact Information:
Brooke Watson
Secretary to the Airport Authority
828-287-6061
airport@rutherfordcountync.gov

Recommended Motion:
Approve minutes.

Rutherford County

Rutherford County Office Building
289 N. Main Street
Rutherfordton, NC 28139

Meeting Minutes
Rutherford County Airport Authority

Tuesday, May 19, 2015 **5:30 PM**

I. Call To Order

Chairman Michael Benfield called the May 19, 2015 meeting of the Rutherford County Airport Authority to order.

Present: Chairman Michael Benfield, Alan Toney, Vice Chairman Eddie Holland, Greg Lovelace and Bryan King

Absent: None.

II. Pledge of Allegiance

Chairman Michael Benfield led in the Pledge of Allegiance.

A. Agenda Approval

Member Bryan King moved to approve the agenda and Member Greg Lovelace seconded.

Ayes: Chairman Benfield, Vice Chairman Holland, Lovelace, King, and Toney
Noes: None

III. Public Comments

None.

IV. Consent Agenda

Member Bryan King moved to approve the Minutes of April 21, 2015 Regular Meeting and Member Greg Lovelace seconded.

Ayes: Chairman Benfield, Vice Chairman Holland, Lovelace, King, and Toney
Noes: None

V. Financial Report

County Manager Steve Garrison reported on the revenues and expenditures through April 2015. There were no questions about the financial report.

Finance Director Paula Roach reported that the 2015-2016 airport budget would be put into the June budget for the Commissioners to adopt. The only change was a salary line item moving to an indirect cost.

Member Greg Lovelace moved to approve the 2015-2016 airport budget and Member Bryan King seconded.

Ayes: Chairman Benfield, Vice Chairman Holland, Lovelace, King, and Toney
Noes: None

VI. Airport Operations Report

Airport Operations Manager Randy Patterson reported that the Environment Protection Agency performed an inspection and found that there were kerosene storage tanks that needed to be replaced. Randy is in the process of getting quotes from Deviney Oil Service and Phillips and Lawing Oil Service to replace the tanks. The quotes will be available at the next meeting. Randy stated that Matt Brown put in a proposal to lease the old terminal building for a flight school which he felt would be a positive influence on the airport.

Member Bryan King asked about the status for the self service fuel system. Airport Operations Manager Randy Patterson stated that there were bids to look over and he was going to consult with Jimmy Luther. County Manager Steve Garrison stated that it would be brought back to the board for consideration after confirming the prices and product.

X. Adjourn

Member Greg Lovelace moved to adjourn and Alan Toney seconded.

Ayes: Chairman Benfield, Vice Chairman Holland, Lovelace, King, and Toney
Noes: None

_____
Chairman, Airport Authority

_____
Vice Chairman, Airport Authority

Attest:

_____
Secretary to the Airport Authority

Agenda Summary Sheet

Rutherford County Office Building
289 N. Main Street
Rutherfordton, NC 28139

File #: ID 15-781, **Version:** 1

Meeting Date: June 16, 2015

May Financial Report

Summary:
The financial report presented to the Board for review.

Budget:
n/a

Contact Information:
Brooke Watson
Secretary to the Airport Authority
828-287-6061
airport@rutherfordcountync.gov

Recommended Motion:
Information only.

RUTHERFORD COUNTY
Airport - Revenue and Expense
Report dates 07/01/2014 - thru - 05/31/2015

Account Number	Account Description	Amended Budget	Period Activity 05/01/2015 to 05/31/2015	Fiscal Year to Date 07/01/2014 to 05/31/2015	Encumbrances	Available Budget	% Used
13-3453-410-01-000	AIRPORT FUEL SALES	420,000.00	-36,055.54	-338,412.14	0.00	81,587.86	80.57
13-3453-800-00-000	AIRPORT MISCELLANEOUS REVENUES	0.00	0.00	-55.00	0.00	-55.00	0.00
AIRPORT		420,000.00	-36,055.54	-338,467.14	0.00	81,532.86	80.59
13-3834-800-01-000	RENTS-AIRPORT	18,400.00	-6,187.27	-29,884.29	0.00	-11,484.29	162.41
MISCELLANEOUS REVENUE RENTS		18,400.00	-6,187.27	-29,884.29	0.00	-11,484.29	162.41
13-3980-980-10-000	CONTRIBUTION FROM GENERAL FUND	80,374.00	0.00	0.00	0.00	80,374.00	0.00
TRANSFERS FROM OTHER FUNDS		80,374.00	0.00	0.00	0.00	80,374.00	0.00
Total Revenue		518,774.00	-42,242.81	-368,351.43	0.00	150,422.57	71.00
13-4101-181-00-000	F I C A	0.00	0.00	0.00	0.00	0.00	0.00
13-4101-181-01-000	MEDICARE FICA 1.45%	0.00	0.00	0.00	0.00	0.00	0.00
13-4101-182-00-000	RETIREMENT EMPLOYER	0.00	0.00	0.00	0.00	0.00	0.00
13-4101-182-01-000	401K EMPLOYER	0.00	0.00	0.00	0.00	0.00	0.00
13-4101-183-01-000	LIFE & DISABILITY INS EMPLOYER	0.00	-2.20	-2.20	0.00	2.20	0.00
13-4101-189-01-000	CAFETERIA ADMINISTRATIVE FEES	0.00	-0.50	-0.50	0.00	0.50	0.00
13-4101-298-01-000	STATE SALES TAX 4.5%	0.00	15.52	368.16	0.00	-368.16	0.00
13-4101-298-03-000	COUNTY SALES TAX 2% & 2.5%	0.00	6.54	164.07	0.00	-164.07	0.00
CLEARING ACCOUNTS		0.00	19.36	529.53	0.00	-529.53	0.00
13-4530-121-00-000	AIRPORT SALARIES REGULAR	38,783.00	2,931.19	36,859.18	0.00	1,923.82	95.04
13-4530-122-00-000	AIRPORT SALARIES OVERTIME	0.00	0.00	724.45	0.00	-724.45	0.00
13-4530-126-00-000	SALARIES TEMPORARY PART-TIME	28,834.00	1,387.29	23,275.42	0.00	5,558.58	80.72
13-4530-181-00-000	F I C A	4,219.00	225.04	3,409.39	0.00	809.61	80.81
13-4530-181-01-000	MEDICARE FICA	986.00	52.62	797.34	0.00	188.66	80.87
13-4530-182-00-000	RETIREMENT	4,980.00	518.46	6,500.38	0.00	-1,520.38	130.53
13-4530-182-01-000	NC RETIREMENT 401K	1,260.00	95.27	1,090.24	0.00	169.76	86.53
13-4530-183-00-000	HEALTH AND LIFE INSURANCE	6,461.00	526.07	4,743.48	0.00	1,717.52	73.42
13-4530-183-01-000	EMPLOYEE EVALUATIONS	100.00	0.00	0.00	0.00	100.00	0.00
13-4530-186-00-000	WORKMENS COMPENSATION	1,677.00	0.00	3,816.00	0.00	-2,139.00	227.55
13-4530-189-01-000	OTHER FRINGE BENEFITS	0.00	0.50	4.59	0.00	-4.59	0.00
13-4530-192-00-000	PROFESSIONAL SERVICES LEGAL	9,000.00	300.00	17,362.01	0.00	-8,362.01	192.91
13-4530-192-01-000	PROFESSIONAL SERVICES OTHER	0.00	0.00	4,310.00	0.00	-4,310.00	0.00
13-4530-199-00-000	PETTY CASH OVER/SHORT	0.00	0.00	91.26	0.00	-91.26	0.00
13-4530-251-01-000	AV FUEL PURCHASES	350,000.00	28,446.94	285,322.52	18,867.52	45,809.96	86.91
13-4530-260-00-000	OFFICE SUPPLIES	1,500.00	0.00	1,172.99	0.00	327.01	78.20
13-4530-260-02-000	SUPPLIES	2,000.00	10.01	1,222.06	0.00	777.94	61.10

RUTHERFORD COUNTY
Airport - Revenue and Expense
Report dates 07/01/2014 - thru - 05/31/2015

Account Number	Account Description	Amended Budget	Period Activity 05/01/2015 to 05/31/2015	Fiscal Year to Date 07/01/2014 to 05/31/2015	Encumbrances	Available Budget	% Used
13-4530-299-00-000	PUBLIC RELATIONS	500.00	0.00	15.69	0.00	484.31	3.14
13-4530-311-00-000	TRAVEL/EXPENSE REIMBURSEMENT	300.00	6.90	944.06	0.00	-644.06	314.69
13-4530-321-00-000	TELEPHONE	1,800.00	573.89	2,875.81	0.00	-1,075.81	159.77
13-4530-325-00-000	POSTAGE	75.00	0.00	45.88	0.00	29.12	61.17
13-4530-331-00-000	UTILITIES SEWER WATER ELECTRIC	7,500.00	525.07	7,250.34	0.00	249.66	96.67
13-4530-351-00-000	REPAIRS & MAINT AIRPORT	11,000.00	53.67	8,876.59	0.00	2,123.41	80.70
13-4530-352-00-000	MAINTENANCE TO EQUIPMENT	8,000.00	215.71	4,467.58	14.44	3,517.98	56.03
13-4530-353-00-000	MAINTENANCE TO VEHICLES	1,000.00	270.07	2,069.55	0.00	-1,069.55	206.96
13-4530-370-00-000	ADVERTISING	500.00	0.00	553.37	0.00	-53.37	110.67
13-4530-440-00-000	SERVICE & MAINTENANCE CONTRACTS	30,000.00	6,789.00	31,114.00	4,450.00	-5,564.00	118.55
13-4530-451-00-000	PEROPERTY/OPERATIONS INSURANCE	7,949.00	0.00	4,211.00	0.00	3,738.00	52.98
13-4530-491-00-000	DUES & SUBSCRIPTION	350.00	0.00	470.50	0.00	-120.50	134.43
AIRPORT		518,774.00	42,927.70	453,595.68	23,331.96	41,846.36	91.93
Total Expense		518,774.00	42,947.06	454,125.21	23,331.96	41,316.83	92.04
Airport Fund		0.00	704.25	85,773.78	23,331.96	109,105.74	81.52

Agenda Summary Sheet

Rutherford County Office Building
289 N. Main Street
Rutherfordton, NC 28139

File #: ID 15-782, **Version:** 1

Meeting Date: June 16, 2015

Surplus-Tractor Tug

Summary:
Information about selling the aircraft tractor tug is presented to the Board for consideration.

Budget:
n/a

Contact Information:
Randy Patterson
Airport Operations Manager
828-288-4017
randy.patterson@rutherfordcountync.gov

Recommended Motion:
Approve the aircraft tractor tug as surplus.

August 9, 2013 V1

Surplus Request Form

Department: AIRPORT Date: 26 MAY 2015

Department Head: RANDY PATTERSON

Item location (Physical address needed): 622 AIRPORT ROAD (HANGER 1A)

RUTHERFORDTON, NC 28139

Item: AIRCRAFT TRACTOR TUG

Make/Model: AEROTECH / AIR HORSE

Age of Item (If known): UNKNOWN

Description of item (defects): UNKNOWN

In working condition when removed from service?

☐ Yes ■ No ☐ Unknown

Reason for Disposal: ITEM HAS BEEN REPLACED

Employee Signature: _____ Date: _____

Dept. Head Signature: Randy E Patterson Date: 26 MAY 2015

Please submit to Finance Department for approval. Pictures will need to be emailed to the Deputy Finance Director.

Approved ☐ Denied ☐

Finance Approval: _____ Date: _____

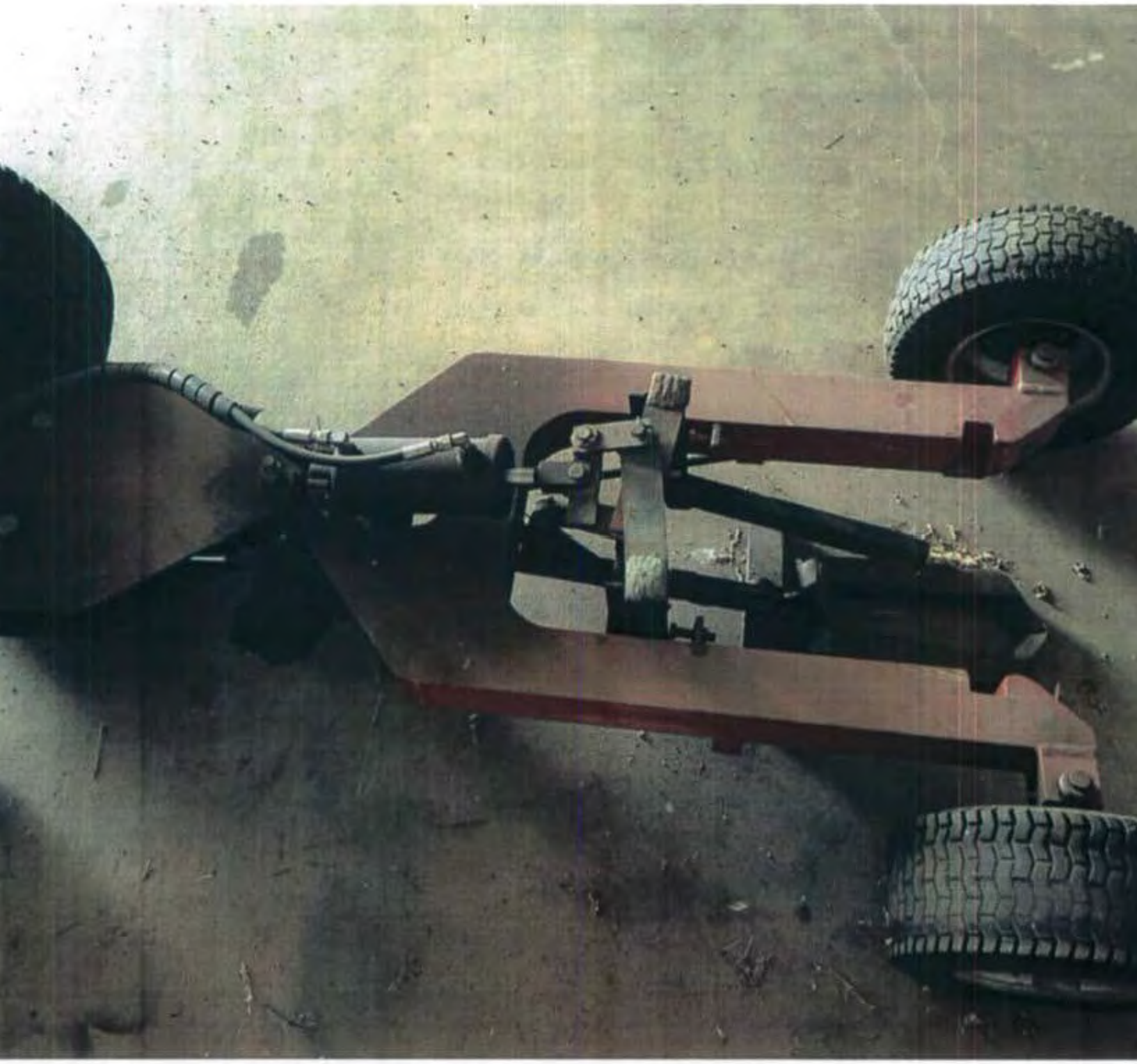
Date placed on GovDeals: _____

AIR HORSE
OPERATION AND SERVICE INSTRUCTIONS
PLEASE READ OPERATION AND LUBRICATION INSTRUCTIONS ON THIS SHEET AND IN THE WHEEL HORSE MANUAL
Aerotech Support, Inc.
The Air Horse
The Preferred Way To Move Aircraft
Aerotech Support, Inc.
Does It Easier-Better-Safer
EFFICIENT
VERSATILE
SAFE
FAST
PREFERRED
DURABLE

otech Support
AIR HORSE

FREE SPIRIT
AVIATION

AIR HORSE



OIL-DRI
EVROLET

Agenda Summary Sheet

Rutherford County Office Building
289 N. Main Street
Rutherfordton, NC 28139

File #: ID 15-783, **Version:** 1

Meeting Date: June 16, 2015

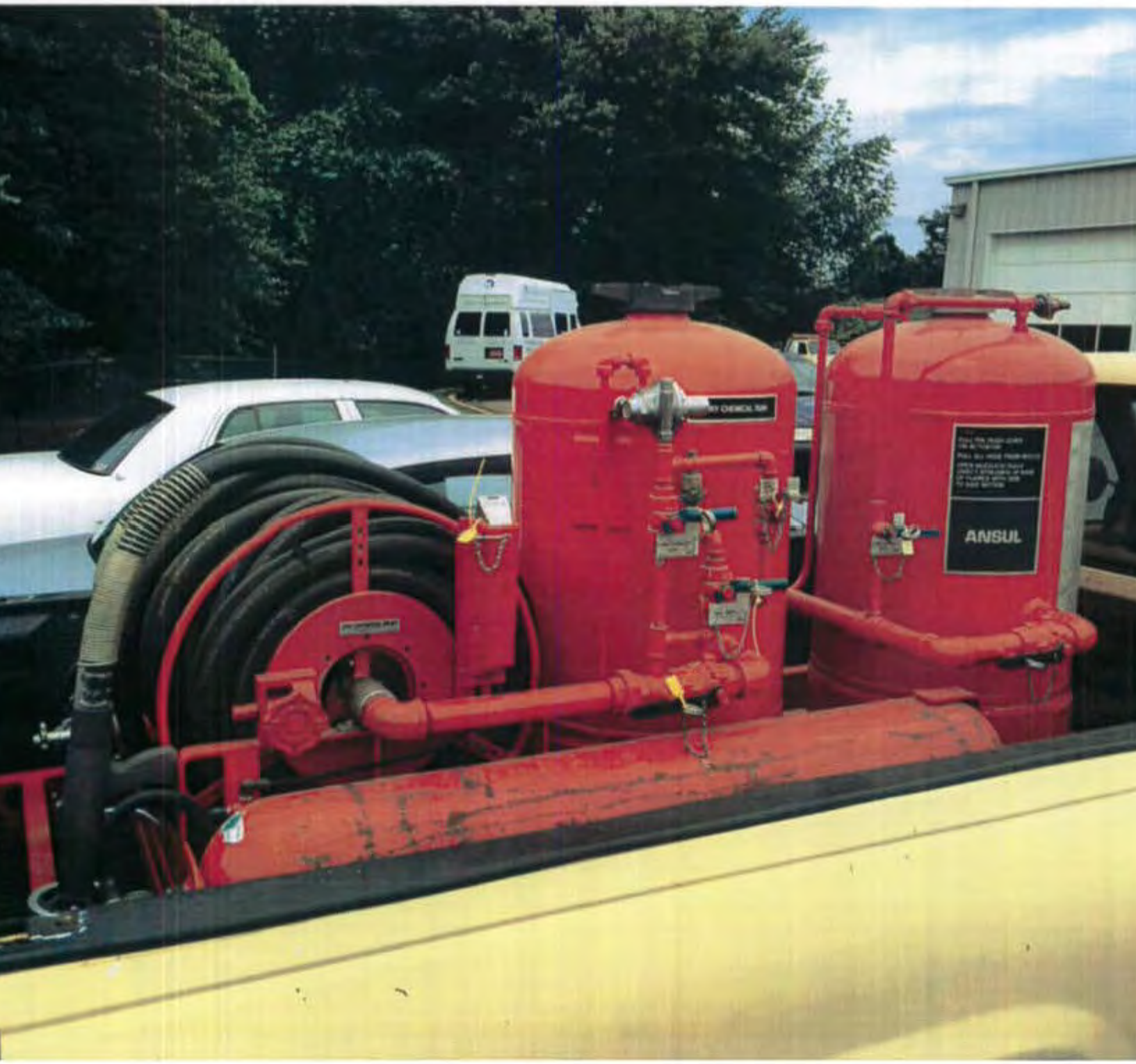
Surplus-Fire Apparatus

Summary:
Information about selling the fire apparatus is presented to the Board for consideration.

Budget:
n/a

Contact Information:
Randy Patterson
Airport Operations Manager
828-288-4017
Randy.patterson@rutherfordcountync.gov

Recommended Motion:
Approve the sale of the fire apparatus as surplus.


ANSUL

Agenda Summary Sheet

Rutherford County Office Building
289 N. Main Street
Rutherfordton, NC 28139

File #: ID 15-784, **Version:** 1

Meeting Date: June 16, 2015

Lease and Operations Agreement Skyhawk Aviation, LLC

Summary:
The lease and operations agreement for Skyhawk Aviation are presented to the Board for consideration.

Budget:
n/a

Contact Information:
Randy Patterson
Airport Operations Manager
828-288-4017
Randy.patterson@rutherfordcountync.gov

Recommended Motion:
Approve the lease and operations agreement for Skyhawk Aviation, LLC.

LEASE AND OPERATIONS AGREEMENT

NORTH CAROLINA
RUTHERFORD COUNTY

Prepared By: Elizabeth T. Miller
Post Office Box 800, Rutherfordton, NC 28139

THIS LEASE AND OPERATIONS AGREEMENT (hereinafter "Agreement"), is made and entered into effective the _____ day of _____, 2015, by and between the **RUTHERFORD AIRPORT AUTHORITY BOARD,** a body politic, hereinafter called "Lessor", and **SKYHAWK AVIATION, LLC**, a North Carolina limited liability company with its principal office located in Rutherford County, North Carolina, hereinafter called "Lessee".

W I T N E S S E T H:

THAT WHEREAS, Lessor is the owner of the Rutherford County Airport (hereinafter "Airport") and is the owner of office space (approximately ___ feet by ____ feet) which is attached to the south side of the Rutherford Airport Hangar, said office space and premises having an address of 622 Airport Road, Rutherfordton, North Carolina 28139, and being referred to herein as the "Subject Property," as more fully described in Section IV of this Agreement, the same being located on a portion of the Airport property; and

WHEREAS, Lessor and Lessee desire to enter into a lease for the Subject Property;

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained in this Agreement, the parties hereby agree as follows:

I.
PURPOSE; QUIET ENJOYMENT

A. **Purpose**. Lessee acknowledges that the real property comprising the Rutherford County Airport has a unique purpose and an irreplaceable value in that it provides taxiway and runway access for aircraft, that existing hangars and land on which hangars can be built are to be used for aviation purposes in such manner as to optimally support Airport operations through lease proceeds, fuel purchases, and utilization of ancillary services, and that such use promotes revenue generating activities for the benefit and growth of the Airport and for the ability of the Airport to provide valuable services to its users.

Based upon the foregoing acknowledgement of purpose, it is agreed and understood that the Subject Property is to be used consistent with the same and with the following specific provisions:

1. The Lessee may utilize the Subject Property for the following purposes:

   a. Flight training.

   b. Professional pilot services.

   c. Flight reviews.

   d. Pilot currency requirements.

   e. Sight-seeing rides.

   f. Aircraft rental to qualified pilots.

Lessee shall be entitled to conduct such business operations and activities on the Subject Property as are reasonably necessary for and consistent with the stated additional purpose of operation of a flight school and the other uses stated herein, provided that Lessee at all times complies with the requirements of subparagraph 2 below.

2. Lessee's use of the Subject Property shall at all times comply with the following requirements:

   a. The Subject Property is for the private use of the Lessee and the commercial use of Lessee as set forth above and shall not be used for any other purpose unless otherwise expressly authorized in writing by the Airport Authority. Lessee shall be entitled to establish and operate a facility on the Subject Property for a flight school, professional pilot services, and the other uses stated in subparagraph 1, together with all related and ancillary uses thereto.

b. Lessee agrees that use of the Subject Property shall be in accordance with Federal, State, and local laws and regulations, including, but not limited, to those pertaining to fire and safety, as well as the Rules and Regulations of the Rutherford County Airport.

c. Lessee's exclusive use is restricted to the Subject Property as described in the attached Exhibit "A" and does not apply to ramp, apron, or taxiway areas. All such exterior areas are common use areas available to all other tenants on the Airport. Lessee agrees that Lessee's aircraft and other property shall not be parked, positioned, placed, or stored in such exterior areas so as to block the use of the ramps, aprons, or taxiways by other Airport tenants or users. The Airport Authority reserves the right to require that aircraft or property be moved if it is interfering with the operation of the airport, in the sole discretion of the Airport Authority.

d. Lessee, its employees and customers shall be allowed to park vehicles only in areas designated and approved for parking by the Airport Authority.

e. Signage affixed to the Subject Property is permitted only with the approval of the Airport Authority.

f. Lessee may make incidental uses of the Subject Property with the prior written permission of the Airport Manager. Absent such written permission, the Subject Property shall only be used for the acknowledged purpose and as stated herein.

B. **Termination for Frustration of Purpose**. The parties acknowledge that circumstances can change during the term of this Agreement, making it impractical and/or impossible for the Lessee to continue its use of the Subject Property in accordance with this Agreement. The parties agree as follows with respect to the right of each, in the event of such interruption, to terminate this Agreement prior to the expiration of the term hereof:

1. If any such interruption of the use of the Lessee should occur and not abate within sixty (60) consecutive days, Lessor may terminate this Agreement in its sole discretion with no further liability by either party hereunder except for obligations incurred prior to the date of said termination. Fifteen (15) days' notice of such termination shall be given to Lessee, during which time Lessee shall have the right to remedy the same.

2. If an interruption of the use of the Lessee should occur as a result of any of those causes specified in this subparagraph 2, and if such interruption does not abate within sixty (60) consecutive days, Lessee may terminate this Agreement in Lessee's sole discretion with no further liability by either party hereunder except for obligations incurred prior to the date of said termination. The causes for which Lessee may terminate this Agreement as set forth in this subparagraph 2 are as follows:

a. The failure of Brown to employ a certified flight instructor or comply with the requirements to operate a flight school as required by the Federal Aviation Administration under Title 14 of the Code of Federal Regulations.

b. Circumstances resulting in the Lessee or Brown no longer owning an aircraft, including but not limited to a sale of such aircraft; and

c. The death of Brown, or the permanent disability of Brown such that he is no longer able to maintain an aircraft.

C. **Failure to Comply**. The parties specifically covenant and agree that a failure by the Lessee to comply with the use of the Subject Property as set forth under Paragraph A above and the incidental uses thereto, shall constitute a default by Lessee under this Agreement and shall entitle Lessor to exercise such remedies as are authorized by Section XX hereunder.

D. **Quiet Enjoyment**. The parties further agree that, subject to all of the terms and conditions hereunder, so long as Lessee shall pay the rent as set forth below and perform all of the covenants and conditions set forth herein which are to be paid and performed on its part, Lessee shall peaceably hold and enjoy the said Subject Property without hindrance or interruption by Lessor. Notwithstanding the foregoing, said right of quiet enjoyment shall be subject to the right of the Lessor, at reasonable times and in a reasonable manner, to enter onto the Subject Property, for the purpose of compliance by Lessor with any of its obligations contained in this Agreement or for the purpose of determining whether Lessee is in compliance with Lessee's obligations hereunder.

II.
AIRPORT RULES AND REGULATIONS

This Agreement is made subject to the Rules and Regulations for the Rutherford County Airport (hereinafter the "Rules and Regulations"), and the same, as amended or changed from time to time, are made an integral part of this Agreement by reference thereto the same as if fully set forth herein.

III.
TERM

The initial term of this Agreement shall be for a period of three (3) years, commencing as of the _____ day of July, 2015, and continuing through the 30th day of June, 2018. Thereafter, provided Lessee is in compliance with all of Lessee's requirements and obligations hereunder, this Agreement shall renew automatically annually for one (1) year

renewal terms unless at least thirty (30) days prior to the end of a renewal term either party shall notify the other party in writing that the Agreement is not being renewed, in which event the same shall terminate as of the end of said renewal term. Notwithstanding the above, Lessor may terminate this Agreement in accordance with the provisions of Section I, Paragraph B above, and either party may terminate this Agreement in accordance with the provisions of Section XX below.

IV.
LEASED PREMISES

Lessor hereby leases to Lessee, and Lessee hereby leases from Lessor, the Subject Property, with improvements, together with the right of ingress and egress for both vehicles and aircraft, the same being shown on the _____ attached hereto as Exhibit "A," which is incorporated fully herein by reference, consisting of approximately 0.____ (_____ square feet of ground space) and being more fully described on the attached Exhibit "B," which is also incorporated fully herein by reference. The improvements include an office space and parking for the same as shown on the attached Exhibit "A". The address for the Subject Property is 622 Airport Road, Rutherfordton, North Carolina 28139.

V.
IMPROVEMENTS; LIENS

A. **Authorized Improvements**. Lessee may construct such additions to the existing hangar on the Subject Property or make such improvements to the leased premises as Lessee desires in accordance with applicable building codes, subject to the requirements of this Section V. If Lessor adopts uniform standards or building regulations applicable to all tenants at the Airport, then Lessee shall construct its improvements in accordance with such standards. Any improvements or construction shall be subject to the prior approval of the Lessor. Lessee shall submit plans and specifications in reasonable and sufficient detail for Lessor and the Federal Aviation Administration, if necessary, to review, and shall file any forms required by the Federal Aviation Administration. If Lessor does not object in writing to the proposed construction or improvements within thirty (30) days detailing the reason for such objection, then the plans and specifications shall be deemed approved. If any portion of the cost of construction is to be financed in any manner or method which would create a lien upon the proposed improvements, Lessee shall comply with the requirements of Paragraph B below.

B. **Liens**. In no event shall the Lessee cause or permit a lien to be created on any portion of the Subject Property, whether or not in connection with the construction of new improvements thereon as authorized above, unless the Lessee shall have secured the prior written approval of Lessor for same.

C. **Improvements to Become Property of Lessor**. All additions or improvements to the Subject Property made by Lessee under this Section V shall become the property of the Lessor upon the termination or expiration of this Agreement.

D. **Agreement to Perform Certain Improvements and Abatement of Rent.** The Lessee agrees to make certain improvements to the Subject Property. The improvements anticipated to be conducted are as shown on Exhibit C attached hereto and incorporated herein by reference. In consideration for the improvements made, the Lessee agrees to abate the monthly rental amount defined in Paragraph VI herein for a period of three (3) years provided the following conditions are met:

1. All improvements must be approved by the Lessor as provided in subparagraph A above.

2. All improvements must be performed in a workmanlike manner and coordinated with and approved by the Rutherford County Planning and Maintenance Department.

3. All improvements must be performed in accordance with all local and state building laws, rules and regulations. All necessary building permits must be obtained and all necessary building inspections must be conducted.

4. All improvements must be finalized on or before _____.

5. The expenditures for improvements must be in the minimum amount of $13,757.46.

6. The Lessee must provide unto the Lessor paid receipts for any and all improvements made. Said paid receipts must be provided to the Lessor within seven (7) days of the work invoiced having been completed. Said paid receipts shall be utilized to verify the expenditures made as required by this Agreement.

In the event that all of the conditions above are met to the satisfaction of the Lessor, then the rental amount for the Subject Property as required in Paragraph VI shall be abated. If the conditions above are not met, then the monthly rental shall be due as required by the terms of this Agreement.

VI.
RENT

In consideration of the rights and privileges granted by this Agreement, Lessee agrees to pay to Lessor during the initial and all renewal terms of this Agreement, as rental for the Subject Property, the sum of Two Hundred Dollars ($200.00) per month, payable between the first and tenth day of each month.

Said rental payments shall be subject to the following terms and conditions:

A. **Place of Payment**. All payments due from Lessee to Lessor shall be delivered or mailed to the Rutherford County Finance Office at that address as set forth in Section XXIV below.

B. **Delinquency Charge.** A delinquency charge of 1.5% per month shall be added to rental payments which are made later than the tenth (10th) day of the month. For purposes of this Paragraph B, a rental payment shall be considered to have been made when the same is received by the Rutherford County Finance Office as specified in Paragraph A above.

VII.
HANGAR SPACE LEASE

A. **Rental Abatement.** In conjunction with the execution of this Lease and Operations Agreement, the Lessee and Lessor have entered into a Hangar Space Lease, of even date herewith, for the rental of space in the Rutherford Airport Authority Hangar (a copy of which is attached hereto as Exhibit ___). In the event that the Lessee complies with the terms and conditions of Paragraph V herein, then the rental amount of two hundred dollars ($200.000) per month due pursuant to said Hangar Space Lease shall abate for a period of three (3) years.

B. **Cross default.** In the event that the Lessee fails to comply with the terms and conditions of this Agreement, said default shall be considered a default in the Hangar Space Lease. Likewise, if the Lessee fails to comply with the terms and conditions of the Hangar Space Lease, said default shall be considered a default of this Agreement.

VIII.
RIGHTS AND OBLIGATIONS OF LESSEE

A. **Operating Standards**. In using the Subject Property and the Rutherford County Airport, Lessee shall meet or exceed the following standards:

1. Lessee shall at all times conform to and meet the requirements of all applicable provisions of the Rules and Regulations for the Rutherford County Airport.

2. Lessee shall meet all expenses and payments in connection with the use of the Subject Property and the rights and privileges herein granted, including taxes, permit fees, license fees, insurance, and assessments lawfully levied or assessed upon the Subject Property or property at any time situated therein and thereon. Lessee may, however, at its sole expense and cost, contest any tax, fee, or assessment.

3. Lessee shall comply with all Federal, State, and local laws and ordinances which may apply to the conduct of the business contemplated, and shall keep in effect and post in a prominent place all necessary and/or required licenses or permits.

B. **Use of Airport Facilities**. Lessee shall be entitled, in common with others so authorized, to the use of all facilities and improvements of a public nature which now are or may hereafter be connected with or appurtenant to the Airport, including the use of landing areas, runways, taxiways, navigational aids, terminal facilities, and aircraft parking areas designated by Lessor.

C. **Airport Board**. Notwithstanding any other provision of this Agreement, Lessee acknowledges and agrees that the authority and responsibility for overall operations of the Airport shall rest with the Rutherford Airport Authority Board as duly appointed by Lessor, and said Airport Board shall at all times have the right to direct and control the operation of the Airport; provided, however, that said Airport Board shall have no right to direct or control Lessee's operations conducted on the Subject Property pursuant to the terms of this Agreement.

IX.
MAINTENANCE AND REPAIR

Lessor shall be responsible for maintenance and repair the roof and exterior of the Subject Property. Lessor shall be responsible for maintenance and repair with regard to navigational aids, such as runway lights, rotating beacons, and parking lights; paved surfaces not located on the Subject Property; and any other common areas or facilities located at the Airport which are not leased to another party.

Lessee shall be responsible for the maintenance and repair of the Subject Property and all improvements constructed or located on Subject Property, except as to the maintenance and repair specifically required of the Lessor above. Lessee shall further be responsible for keeping the Subject Property free of litter and other debris, for mowing

any grassy areas on the Subject Property, and for maintaining the Subject Property in a state of cleanliness and neatness at all times.

Lessor shall at all times have the right to enter the Subject Property for the purpose of responding to emergency situations or reasonably protecting Lessor's rights under this Agreement.

X.
UTILITIES

Lessee shall pay all utility charges imposed upon the Subject Property during the term of this Agreement for all utilities, including but not limited to electricity, water, sewer, gas, and other utilities.

XI.
AD VALOREM TAXES

During the term of this Agreement, Lessee shall pay any and all Rutherford County ad valorem property taxes and assessments imposed upon the Subject Property and Lessee's personal property located upon the Subject Property, including any applicable fire district taxes.

XII.
INSURANCE

A. **Lessee's Required Insurance**. Lessee shall obtain and maintain continuously in effect at all times during the term of this Agreement, at Lessee's sole expense, the following insurance:

1. Comprehensive general liability insurance as against any and all liability by reason of Lessee's conduct incident to the use of the Subject Property, or resulting from any accident occurring on or about the roads, driveways, or other public places, including runways and taxiways, used by Lessee at the Airport, caused by or arising out of any wrongful act or omission of Lessee, in the minimum amounts of $1 million for bodily injury or death to any person and $1 million for property damage;

2. Fire and extended insurance coverage for all of Lessee's contents and personal property on the Subject Property, in such amount as Lessee shall deem to be adequate; and

3. Such other insurance as may be required by the Rules and Regulations.

B. **Lessor As Insured.** The insurance specified under Paragraph A above shall name Lessor as an additional insured on each of the policies therefore, and Lessee shall furnish to Lessor annually a certificate of insurance evidencing Lessee's compliance with said requirement.

C. **Lessor's Required Insurance**. Lessor shall obtain and maintain continuously in effect at all times during the term of this Agreement, at Lessor's sole expense, fire and extended insurance coverage for all improvements on the Subject Property equal to the fair market value of these improvements.

D. **Notice.** Lessor agrees to notify Lessee in writing as soon as practicable of any claim, demand, or action arising out of an occurrence covered hereunder of which Lessor has knowledge, and to co-operate with Lessee in the investigation and defense thereof. Lessee likewise agrees to notify Lessor in writing as soon as practicable of any claim, demand, or action arising out of an occurrence covered hereunder as soon as Lessee learns of the same.

XIII.
INDEMNIFICATION

To the extent not covered by insurance carried in favor of the Airport Authority, Lessee shall keep and hold harmless the Airport Authority and Rutherford County from and against any and all claims, demands, suits, judgments, costs, and expenses (including attorneys' fees) asserted by any person or persons, including agents or employees of the Airport Authority or Rutherford County or Lessee, by reason of death or injury to persons or loss or damage to property, resulting from Lessee's operations or anything done or omitted by Lessee under this Agreement, except to the extent that such claims, demands, suits, judgments, costs, or expenses may be attributed to the negligence or intentional acts of the Airport Authority or Rutherford County or its agents or employees.

XIV.
LESSEE AS INDEPENDENT CONTRACTOR

In using the Subject Property and the Rutherford County Airport, Lessee acknowledges that he acts as an independent contractor and not as an agent of Lessor.

XV.

ASSIGNMENT AND SUB-LETTING

Lessee may not assign this Agreement or sublet all or any portion of the Subject Property without first having secured the written consent of the Lessor.

XVI.
LAWFUL USE

Lessee covenants and agrees with Lessor that it will not use or permit the Subject Property to be used for any unlawful purpose or permit thereon anything which may be or may become a nuisance, or cause damage to the property, nor do or permit to be done on said Subject Property anything which may render void or voidable any policy of insurance on said premises. Lessee further agrees that it will not use or permit the Subject Property to be used in violation of any Federal, State, or local law or ordinance.

XVII.
CASUALTY RENTAL ABATEMENT

If Lessee is dispossessed of the Subject Property due to fire to other casualty loss, then and in that event, the rent provided for herein shall abate until sufficient repairs have been made to allow Lessee to re-enter and occupy the Subject Property.

XVIII.
NON-EXCLUSIVE RIGHT

It is understood and agreed that none of the privileges granted Lessee for use of public or common areas are exclusive, and that it shall always be within the power and authority of Lessor to grant to such other parties similar privileges as Lessor may deem to be in the best interests of aviation and the Rutherford County Airport. It is further understood and agreed that the use of all landing areas and taxiways shall be open at all times to all persons, firms, and corporations desiring to use the same, provided only that they shall be required to use the same in accordance with all applicable Federal, State, and local laws, ordinances, rules, and regulations. Nothing in this Agreement shall be construed to grant or authorize the granting of any exclusive right with the meaning of Section 308(a) of the Federal Aviation Act of 1958, as amended.

XIX.
REQUIREMENTS OF THE UNITED STATES

This Agreement shall be subject and subordinate to the provisions of any existing or future agreement between Lessor and the United States or any agency thereof, relative to the operation or maintenance of the Airport, the executive of which has been or may be required as a condition precedent to the expenditure of Federal funds for the development or operation of the Airport; provided, however, that Lessor shall, to the extent permitted by law, use its best efforts to cause any such agreements to include provisions protecting and preserving the rights of Lessee in and to the Subject Property, and to compensation for the taking thereof, interference therewith, and damage thereto, caused by such agreement or by actions of Lessor or the United States pursuant thereto.

XX.
DEFAULT AND TERMINATION

A. **Termination by Lessee**. This Agreement shall be subject to termination by Lessee in the event of any one or more of the following:

1. The abandonment of the Airport as an airport or airfield for any and all types, classes, or categories of aircraft;

2. The default by the Airport Authority in the performance of any of the terms, covenants, or conditions of this Agreement, and the failure of the Airport Authority to remedy, or undertake to remedy, to Lessee's satisfaction, such default for a period of fifteen (15) days after receipt of written notice from Lessee to remedy the same;

3. Damage to or destruction of all or a material part of the Subject Property or Airport facilities necessary for the operation of Lessee's business, such that Lessee is unable to carry on its business at the Airport for a period in excess of ninety (90) days; or

4. The lawful assumption by the United States, or any authorized agency thereof, of the operation, control, or use of the Airport, or any substantial part or parts thereof, in such a manner as to substantially restrict Lessee from conducting business operations for a period in excess of ninety (90) days;

5. Thirty (30) days notice from Lessee to the County Manager.

B. **Termination by the Airport Authority**. This Agreement shall be subject to termination by the Airport Authority in the event of any one or more of the following:

1. The default by Lessee in the performance of any of the terms, covenants, or conditions of this Agreement, and the failure of Lessee to remedy, or undertake to remedy, to the Airport Authority's satisfaction, such default for a period of fifteen (15) days after receipt of written notice from the Airport Authority to remedy the same;

2. The default by Lessee in the performance of any of the terms, covenants, or conditions of that Hangar Lease Agreement dated _____;

3. The filing by Lessee of a voluntary petition in bankruptcy, or any involuntary petition in bankruptcy filed by Lessee's creditors, or the making by Lessee of a general or other assignment for the benefit of creditors, or the adjudication of Lessee as a bankrupt, or the appointment of a receiver for the property or affairs of Lessee where such receivership is not vacated within thirty (30) days after appointment of the receiver;

4. The occurrence of any other event which under the provisions of this Agreement results in termination of part or all hereof;

5. The conviction any owner-operator of Lessee, of a felony under Federal or State law;

6. The abandonment of the Airport as an airport or airfield for any and all types, classes, or categories of aircraft; or

7. The abandonment of the premises by Lessee or the abandonment of commercial operations for a period of thirty (30) days.

C. **Exercise**. Exercise of the rights of termination as set forth above shall be by written notice to the other party.

D. **Removal of Property**. Upon termination of this Agreement for any reason, Lessee, at its sole expense, shall remove from the Subject Property all signs, trade fixtures, furnishings, personal property, equipment, and materials which Lessee was permitted to install or maintain under the rights granted herein. If Lessee shall fail to do so within thirty (30) days, then Lessor may effect such removal or restoration at Lessee's expense, and Lessee agrees to pay Lessor such expense promptly upon receipt of a proper invoice therefore.

E. **Causes of Breach; Waiver**.

1. Neither party shall be held to be in breach of this Agreement because of any failure to perform any of its obligations hereunder if said failure is due to any cause for which it is not responsible and over which it has no control; provided, however, that the foregoing provision shall not apply to failures by Lessee to pay fees or other charges to the Airport Authority.

2. The waiver of any breach, violation, or default in and with respect to the performance or observance of the covenants and conditions contained herein shall not be taken to constitute a waiver of any such subsequent breach, violation, or default in or with respect to the same or any other covenant or condition hereof.

XXI.
BENEFIT

This Agreement shall be binding upon and shall inure to the benefit of the respective parties, their heirs, successors, and assigns.

XXII.
SEVERABILITY

If any provision of this Agreement shall be declared invalid or unenforceable, the remainder of the Agreement shall continue in full force and effect.

XXIII.
CUMULATIVE REMEDIES

The specified remedies to which Lessor may resort under the terms of this Agreement are cumulative and are not intended to be exclusive of any other remedies or means of redress to which Lessor may be lawfully entitled in case of any breach or threatened breach by Lessee of any provisions hereof.

XXIV.
NOTICE

Whenever under the terms of this Agreement either party shall be required or permitted to give notice to the other, such notice shall be in writing and shall be delivered either by first class U.S. mail or by hand-delivering such notice, as follows:

TO LESSOR: County Manager
Steve Garrison
289 North Main Street
Rutherfordton, North Carolina, 28139
WITH A COPY TO:

Airport Manager
Rutherford County Airport
622 Airport Road
Rutherfordton, NC 28139

TO LESSEE:

XXV.
ENTIRE AGREEMENT

This Agreement and the Hangar Lease Agreement contain the entire agreement and understanding between the parties. There are no oral understandings, terms, or conditions, and neither party has relied upon any representation, express or implied, not contained in this Agreement. All prior understandings, terms, or conditions are deemed merged in this Agreement, and the same may not be changed orally, but only by an amendment in writing signed by both parties.

IN WITNESS WHEREOF, the parties have caused this instrument to be executed under hand and seal by authorized officers and by authority duly given, the day and year first above written.

LESSOR:

RUTHERFORD AIRPORT AUTHORITY

By: _____
_____, Chairman,
Rutherford Airport Authority

LESSEE:

SKYHAWK AVIATION, LLC

By: _____
Matt Brown, Member/Manager

STATE OF NORTH CAROLINA
COUNTY OF RUTHERFORD

I, _____, a Notary Public of the County of _____ and State of _____, do hereby certify that _____ personally came before me this day and acknowledged that he is the Chairman of Rutherford Airport Authority, and that he, as Chairman, being authorized to do so, executed the foregoing instrument on behalf of the corporation.

Witness my hand and official stamp or seal, this the _____ day of _____, 2015.

_____
Notary Public

My commission expires: _____

STATE OF NORTH CAROLINA
COUNTY OF RUTHERFORD

I, _____, a Notary Public of the County of _____ and State of _____, do hereby certify that **Matt Brown** personally came before me this day and acknowledged that he is the Member/Manager of **Skyhawk Aviation**, a North Carolina limited liability company, and that by authority duly given and as an act of the limited liability company, the foregoing instrument was signed in its name by him as Member/Manager.

Witness my hand and official stamp or seal, this the _____ day of _____, 2015.

_____
Notary Public

My commission expires: _____

EXHIBIT for Sky Hawk Aviation, LLC Lease

Building Description:

- Building space is located at the south, east corner (attached) of the primary Rutherford County Airport hangar.
- The building space is approximately 650 square feet (26'x25').
- The coordinates for the building is 35°25'49 N 81°56'12 W.

Exhibit B

Improvements

Replace carpet and vinyl flooring	$ 2,284.88
Repair, replace and paint drywall, ceiling tiles and walls	$ 3,400.00
Install 13 Seer 1 ½ ton tempstar heat pump heat pump	$ 4,656.00
Install RF 30 insulation in ceiling	$ 950.00
Install new operable windows	$ 1,816.58
Install two new toilets	$ 300.00
Repair and install where needed, doors, knobs, faucets	$ 350.00
Total:	$13,757.46

Agenda Summary Sheet

Rutherford County Office Building
289 N. Main Street
Rutherfordton, NC 28139

File #: ID 15-787, **Version:** 1

Meeting Date: June 16, 2015

Work Authorization for Airport Layout Plan

Summary:
The information for the airport layout plan is provided for the Board's consideration.

Budget:
n/a

Contact Information:
Jimmy Luther
WK Dickson & Co., Inc.

Recommended Motion:
Approve the work authorization for the airport layout plan.

Brooke Watson

From: Jimmy Luther [jluther@wkdickson.com]
ent: Thursday, June 11, 2015 2:12 PM
To: Steve Garrison; Brooke Watson; Paula Roach
Cc: Joseph Barkevich; 'bkyap@ncdot.gov'
Subject: ALP-Update
Attachments: 2015-6-11 WA 3 ALP.PDF

Steve,
Attached is the Work Authorization we were speaking about on Tuesday. I wasn't certain I would have it completed for your 6-18 meeting but if it can be added to the agenda as an action item for approval that would be great.(we can provide executed This follows our "template" as reviewed by NCDOA/FAA.
Even after local approval there is the process of submitting to NCDOA for a grant assignment and establishing concurrence.
If you have any questions please feel free to contact me or Joe Barkevich; Joe heads up our Aviation Planning group.
I really appreciate that you allotted your time and staff's to meet this past Tuesday! Hopefully we can all move off pause and get development back on track at the airport in the near future.

Thanks Again,

James A. Luther
Aviation Program Manager
WK Dickson & Co., Inc.
616 Colonnade Drive
Charlotte, NC 28205
Office: 704-334-5348-ext. 127
Mobile: 704-560-3167
Email: jluther@wkdickson.com
www.wkdickson.com

RUTHERFORD COUNTY AIRPORT AUTHORITY
WORK AUTHORIZATION 3

Airport Layout Plan Update
June 11, 2015

Contract for Professional Services
March 8, 2011

Project Description

Rutherford County Airport Authority have established an objective of creating a planning document that provides the tools needed to guide them through proper development of the Airport for the next 20 year planning period. The Airport Authority has determined that an update to their existing Airport Layout Plan can meet this objective.

The CONSULTANT proposes to provide the service of updating this planning document and submits a proposal to complete an Airport Layout Plan with the following tasks in order to provide the best possible near and long-term solution to developing the Rutherford County Airport.

Scope of Services

See Attachment A

Deliverables

1. The CONSULTANT will provide copies to the OWNER, NCDOA and FAA, of drawings and documents produced under this Work Authorization. Electronic copies, in pdf and/or AutoCAD format will be made available upon request to any of these parties.
2. Copies for grant applications, agreements and reimbursements.

Fee Schedule

The OWNER will pay, and the CONSULTANT agrees to accept as full compensation for services under this Work Authorization a Lump sum fee of One Hundred Seventy Seven Thousand Eighty Dollars $177,080.

Owner:

Rutherford County Airport Authority

_____

Chairman

Consultant:

W.K. Dickson & Co., Inc.

_____

Brian L. Tripp, PE, BCEE
Vice President

This instrument has been pre-audited in the manner required by local government and fiscal control.

_____

INTRODUCTION

Rutherford County has established an objective of creating a planning document that provides the tools needed to guide them through proper development of the Rutherford County Airport (FQD) for the next 20 year planning period. The County has determined that an update to their existing Airport Layout Plan (ALP) can meet this objective. The last ALP update was created in 2005 and submitted to the North Carolina Division of Aviation for approval in August 2005, but WK Dickson and the Town of Elkin have no record that it was conditionally approved.

Future development of an existing airport requires a logical and systematic approach that integrates standard airport development criteria with creative design. Of utmost importance is the ability to identify the key issues for the particular airport and to develop an airport layout planning document that will address these key issues and provide a guide for growth of the facility.

W.K. Dickson & Co., Inc. proposes to provide the service of updating this planning document and submits a proposal to complete an Airport Layout Plan (in compliance with FAA AC 150/5070-6B, latest change) with the following tasks in order to provide the best possible near and long-term solution to developing the Rutherford County Airport.

PHASE I - AIRPORT REQUIREMENT STUDIES

Task 1: Study Design:

Objective: To determine the contractual scope of services, schedule, and costs required to prepare the Update to the Rutherford County Airport Layout Plan (ALP).

Scope: The initial step in the planning process is to develop an acceptable study design. This study design includes the identification of study issues developed resulting from a review of available data, extracting those factors which are the impetus for the study, and derive specialized efforts to be carried out in association with the Plan.

Several issues identified as having importance to the future of the Airport include:

- General Aviation Activity Growth;
- Runway Length Needs;
- Approach and Minima Demands;
- Terminal Area Alternatives;

- Taxiway System Modification/Development;
- Airport Development Land Acquisition Needs.

Working closely with the County Officials and Airport Management, we propose to reach decisions concerning the projects end-product and final study format, including development of methodologies and evaluations. This may include formal and informal meetings to discuss scope and direction of objectives to the Sponsor. This final scope will address the criteria and policies framework in which the study is to be prepared.

All required federal and state forms will be prepared throughout the course of the Study, as a part of this Scope of Services.

Task Product: Establish the priorities of the Sponsor in the long term development of the Airport.

Task 2: Data Collection and Inventory:

Task 2 provides a background for developing future projects and needs at the airport that will ultimately be utilized in justifying any recommended development items.

Objective: Inventory and collection of data pertaining to the Study essential for determining existing services, constraints, and projecting future needs of the facility and ultimate completion of the Airport Layout Plan Update.

A. Socioeconomic Information: Historic and projected information for the 20-year planning period, as may be readily available by local sources, will be assembled. Data includes:

- Population Statistics
  - --historic
  - --projected

- Land Use
  - --existing
  - --adopted and/or Community Transportation and Comprehensive Plans (if available)
  - --zoning (if available and in place)

B. Aeronautical Study: Inventory of aircraft based at the Airport, will be listed by category:

- Single Engine Piston

- Multi-Engine Piston
- Turbo-Prop
- Jet
- Rotorcraft
- Other

C. Existing Studies: Generally review existing studies which impact the development of this update, as may be available:

- Current Airport Layout Plans/Reports
- ALP Drawings
- Property Information
- State Airport System Plan Information
- National Plan for Integrated Airport Systems
- FAA Terminal Area Forecasts (TAF)

D. Airfield Inventory: Data on the existing airfield facilities and terminal area components of the airport will be collected. This will include:

- Runways (length, width, and strength)
- Taxiways (length, width, and strength)
- Space Allocation
  --based aircraft
  --itinerant aircraft
  --military aircraft, if any
- Airport Acreage
  --fee simple
  --easement
- Pavements
  --condition
  --type
- Geometric Standards and Approach Surfaces, including:
  --runway centerline to taxiway centerline
  --runway centerline to building restriction line
  --taxiway centerline to building restriction line
  --taxiway centerline to apron edge
  --Runway Safety Area, RPZ, OFA, OFZ, RAZ, RDZ
  --FAR Part 77 Approach Surfaces
  --TERPS Surfaces
  --Departure Surfaces

- Terminal Area
  - --buildings by function/condition
  - --access roads
  - --apron areas, parking positions by type
  - --tie-downs, anchors
  - --hangars
    - conventional
    - maintenance
    - office
    - T-hangars
  - --vehicular parking
- Lighting and NAVAIDS
  - --runway lights
  - --taxiway lights
  - --VASI, PAPI, or PLASI
  - --segmented circle/wind cone
  - --NAVAIDS
  - --REIL
  - --obstruction lights
  - --other components
- Specific geometric dimensions such as:
  - --distance from apron to edge of taxiway
  - --taxiway widths
  - --access road length
- Aircraft
  - --Based
    - single-engine piston
    - multi-engine piston
    - turboprop
    - other (helicopters)
  - --Operations
    - based, by type
    - itinerant, by type
    - rotorcraft and other
    - existing large aircraft counts from FBO/management log
- Airspace
  - --VFR or Instrument approaches
  - --airfield communications
- Weather Data
  - --wind roses (wind coverage)

* VFR
* IFR
* All Weather

✈ Interviews
--Meetings with Airport Management to gain knowledge of the Airport's operation.

Task Product: A data base regarding the airport and its service area would be developed for use throughout the Study. Additional data would be acquired from various sources including the County, the Local Governments, the FAA, and the State of North Carolina, as needed.

Sub-Task 2a: Aerial Photography and Photogrammetry:

Objective: Collect Aerial photogrammetry of the existing airport and inner runway approach zones (RAZs) up to 100' above each runway end elevation using the proposed approach slope, plus photogrammetric data of building elevations. Ground Control will be established by WK Dickson and Aerial Photography and Photogrammetry will be completed by a Greenman-Pedersen, Inc. per FAA AC's 150-5300 16A, 17C & 18B.

Such data provides information for planning and designing potential development projects under near existing site conditions and provides a basis for future obstruction mitigation and airspace configuration and development. Additionally, safety-critical data will be collected per FAA AC's 150-5300 16A, 17C & 18B to accommodate the FAA AGIS system and its requirements.

Sub-Task Product: Color aerial photograph and photogrammetric data at 1" = 400' scale with 2-foot ground elevation contours, of up to 600 acres (Airport property plus planned and existing inner runway approach zones). Photogrammetric data to be used to develop planimetrics of Airport and adjacent properties, for use in ALP Update sheets and other graphics as needed as well as compliance with FAA AGIS system.

Sub-Task 2b: As-Built Layout Plan:

Objective: An as-built layout plan that depicts existing facilities is critical to this ALP Update as an accurate baseline. Such data is needed to ensure that both current operations and future development is based on valid assumptions regarding the Airport and its vicinity.

Sub-Task Product: As-built layout drawings for up to 500 acres (Airport property plus adjacent parcels) will be compiled using data collected for photogrammetry, plannimetric, obstructions, parcels, topography, and field survey and utilized in the ALP Update for the Airport Layout Plan sheet, and other required drawings of the Update. A meeting with Airport

Management, and his invitees, to discuss the project status and draft planning documents will be held. Aerial photogrammetry data will be collected per FAA AC 150-5300 16A, 17C & 18B at the beginning of this project for safety-critical features including NAVAIDs, runway attributes, obstructions as well as non safety-critical features such as terminal area pavement edges and buildings and provided for use during the project.

Task 3: Determination of Long Term Facilities Requirements:

Objective: Assimilate the data collected in Task 2 to derive an aeronautical demand for the 20-year time frame in 5, 10, and 20-year increments, of the plan update.

A. Forecasts: Forecasts of activity would be presented/obtained to reflect current demand and activity trends.

Aviation forecasts will be extracted from data available from the NCDOA and FAA's TAF to assist the short, intermediate, and long-range planning of the airport and its facilities. These forecasts will be reviewed and adjusted to reflect current conditions at the Airport. Various forecast planning methods will be utilized including 'operations per based aircraft', 'national market analysis', 'regional market analysis', 'state market analysis', 'historic trend of operations', and any state available state system planning document data. The TAF will be used as a comparison only. A planning average will be developed based on the published forecast data, regression methodologies, State System Plan data, and applicable Regional data. Aviation forecasts would be presented for aviation activity as follows:

- Aircraft expected to be based at the Airport;
- Aircraft mix (by engine type, and number of engines);
- Determination of a Design Category of Aircraft;
- Aircraft operations (mix, total, itinerant, and peaking factors);
- Passengers, General Aviation, Air Taxi and comparison of historical vs. expected passenger data to determine Terminal Building needs and services that may be expected.

B. Facility Requirements: Based on the Capacity analysis and FAA guidelines, the facilities required to meet expected demand levels would be determined. Facility requirements would be staged into short (5 years), intermediate (10 years), and long-range (20 years) requirements based upon the various years' forecasts. Requirements would be determined for the following elements:

- Airport Category

- Runways - length, width, strength, runway protection zones, approach slopes, configuration and alignment;
- Taxiways - width, strength, clearance, and alignment;
- Apron - size, strength, and number of tie-downs;
- Navigational aids – type and locations;
- Pavement Marking - approaches, runways, taxiways;
- Lighting;
- Terminal Area - terminal/administration building, service hangars, and storage hangars. Specific effort will be focused on the purpose and future requirements of the Terminal Building including recommended future uses;
- Vehicular parking; and,
- Military needs, if any.

Task 4: Rwy Ext. Justification Data Collection/Analysis:

Objective: Collect and analyze data that identifies the operators facility needs for at least the first 5-years. This will provide insight into the immediate need for any runway extensions, improved approaches, and other airside and terminal area needs.

Task Product: At the initiation of the ALP, the following tasks will be undertaken to ensure the results of the survey reflect reasonable understandings of the needs of the users, existing and anticipated future requirements for the Airport and to consider the potential impacts of the proposed projects, as well as other alternatives:

A. **Develop and Distribute User Survey** – This task will create a logical user survey by using the ideals established in Tasks 1 and 2. A potential user database will be created through market research in order to establish contact information for individuals and companies with aircraft that could locate and/or operate at the Rutherford County Airport. The survey will be distributed via United States Postal Service (USPS) and follow-up phone calls will be made as necessary in order to realize a prompt and accurate response. All responses will be tabulated and formatted for analysis in subsequent phases of the ALP.

B. **Identify and Quantify User Data** – The aviation user data will be quantified and summarized to provide a report on the needs found for the Airport. The analysis will estimate the market service potential including projected based aircraft and operations for the first five (5) years covered by the ALP.

C. **Justification Conclusions** – The final phase of the justification will examine the findings and recommend development utilizing guidance from FAA AC 150/5325-4B (latest change) *Runway Length Requirements for Airport Design*.

PHASE II - AIRPORT PLANS

Following the completion of Phase I of the plan update, drawings depicting proposed development at the Airport will be prepared. Prior to finalization, appropriate alternatives will be presented to the Airport for consensus prior to proceeding. All drawings would conform to current FAA guidelines.

Task 5: Airport Layout Plan & Property Map:

Objective: Update the Airport Layout Plan incorporating the recommended facilities ascertained in Task 3 and a Property Map outlining properties currently owned and planned for acquisition.

The Airport Layout Plan (ALP) would display the Airport and immediate environs and include:

- Location and vicinity maps;
- Runway and Airport data tables;
- Wind information;
- Runway Protection Zones;
- Staging of development (existing and through ultimate);
- Runway/taxiway configurations;
- Apron areas;
- Buildings;
- Automobile parking;
- Access roads;
- Navigational Aids (on/off airport-visual & instrument);
- Geometric dimensions, and
- Airport property lines, property history and previous ownership, and any potential property acquisitions or releases.

The ALP will be prepared in accordance with ARP SOP 2.0 and the associated ALP Review Checklist will be utilized for QC and completeness review and submitted with the draft ALP.

The Property Map will be represented by a separate plan sheet that outlines the existing properties owned in fee simple and avigation easement, as well as properties planned for acquisition in either fee simple or avigation easement.

Task 6: Airport Airspace Drawing:

Objective: Update of the Airport Airspace Drawing relative to any criteria changes made requisite by accommodation of the long-term facilities requirements.

Scope: The Airport Airspace Drawing will display the imaginary surfaces associated with the Airport as designated in FAR Part 77, as amended. The plan will include the approach profiles and identify all obstructions to FAR Part 77 surfaces based on data collected in Task 2a.

Task Product: A new Airport Airspace Drawing will be produced and any obstructions will be identified.

Task 7: Inner Portion of the Approach Surface Drawings:

Objective: Update of the Inner Approach Surface Drawings that depict all necessary surfaces, including those additions planned through Task 3.

Scope: The Inner Approach Drawing will display the surfaces associated with Runway Protection Zones (RPZ), FAR Part 77 Approach Zones and TERPS Surfaces out to 100' above Airport elevation and based upon each runway end's approach slope. The Plan will include known obstructions, property line (if in its bounds), roads, railroads, their elevations, and clearances to approach surfaces and ground contours. The features will be shown in plan and profile at a suitable scale and will provide a tabular summary of obstruction details and proposed disposition.

Task Product: Updated Inner Portion of the Approach Surface Drawings with obstruction analysis results will be produced.

Sub-Task 7a: Aerial Topography and Obstruction Analysis:

Objective: An analysis of potential obstructions and development upon the existing topographic constraints is essential to this ALP Update. Such data provides information for planning and designing potential development projects under near existing site conditions and provides a basis for future obstruction mitigation and airspace configuration and development.

Sub-Task Product: Analysis will be performed for FAR Part 77, TERPS, and Departure Surfaces utilizing the aerial photogrammetry, topography, and obstruction data collected in Task 2a.

Task 8: Runway Departure Surface Drawings:

Objective: Update the Departure Surface Drawings that depict all necessary surfaces, including those additions planned through Task 3.

Scope: The Departure Surfaces will provide a geographic representation of known obstructions in plan and profile to the Surface based upon each runway end's existing or proposed departure end. The Plan will include known obstructions, property line (if in its bounds), roads, railroads, their elevations, if known, and clearances to the departure surfaces and ground contours. The features will be shown in plan and profile at a suitable scale and will provide a tabular summary of obstruction details and proposed disposition.

Task Product: Updated Departure Surface Drawings with obstruction analysis results will be produced.

Task 9: Terminal Area Plan(s):

Objective: Prepare a Terminal Area Plan(s) incorporating the recommended facilities ascertained in Task 3.

Complementing the Airport Layout Plan, drawing(s) of recommended terminal area facilities would be prepared and displayed in a fashion that outlines logical planning stages (I – years 0-5, II – years 6-10, and III – years 11-20). The Terminal Area Plan(s) would display conceptual level design of the following elements:

- Building locations/general size;
- Aircraft parking apron - tie-downs, unloading area, fuel area, and temporary parking;
- Vehicular parking areas;
- Access and service roads, and Security fencing;
- Any lands to needed be purchased for the planned development.

Several alternatives to all or portions of the terminal area development may be created and discussed either formally or informally with the Airport Management and County Officials. A "best" development alternative will be discovered in this process.

Task Product: A recommended plan for the terminal area development exhibited in Terminal Area Plan Drawing(s).

Task 10: Land Use Plan and Recommendations:

Objective: 1. Document Airport noise contours of 65 DNL and higher generated from the *Integrated Noise Model* software program, using the Airport's ultimate airfield configuration and forecasts developed in Task 3. Also document general land uses in the vicinity of these contours. 2. Provide recommendations to the Local Government and the Airport on surrounding land uses that are compatible or incompatible with Airport Activity under the Airport's ultimate development plan, protected surfaces, and noise contours.

Task Product: Land Use Drawing depicting current Noise sensitive areas within the 65 DNL and general land use around the airport, as well as for the ultimate 20-year condition, Land uses outside the 65 DNL Noise Exposure Level will also be shown. Provide a list of recommended general land uses that are compatible with Airport activity and required FAA/FICON Noise Exposure Levels. Includes an inventory of existing land uses adjacent to the Airport and in the vicinity of the noise contours produced for the ALP, use any available existing comprehensive land use and zoning ordinances and maps, including any airport height and hazard ordinance to produce recommendations for surrounding land uses.

PHASE III - FINANCIAL PLAN/DOCUMENTATION

Based upon the proposed development for the short, intermediate, and long-range planning periods, cost estimates and general financing schemes would be prepared.

Task 11: Schedules of Development:

Objective: Formulate a recommended Staged plan for development of the recommended long-term facilities.

An analysis would be undertaken to determine priorities in developing proposed aviation facilities. From this analysis, staging of proposed development would be recommended based on expected demand levels. The staging sequence would be delineated on the airport plans.

Task Product: Staged depiction of recommended long-term facilities development.

Task 12: Estimates of Development Costs:

Objective: Prepare cost estimates for the recommended facilities development.

Cost estimates for the recommended facilities would be prepared to describe the range of capital funding requirements for each development stage. Estimates would be presented for specific airport development items such as:

- Land acquisition;
- Building;
- Runways;
- Taxiways;
- Aprons; and,
- Navigational aids.

These costs would be broken down by development stage utilizing the most recent construction costs available.

Task Product: Cost estimates by scenario stage years for the average range forecast of the recommended long-term facilities development.

Task 13: Documentation (Coordination/Document Prep):

Objective: Undertake a program of coordination and prepare an ALP Update report to accompany the drawing set and documenting the ALP Update process, findings, and recommendations.

This task consists of two sub-tasks, coordination and document preparation.

A. Coordination – Three formal or informal meetings are anticipated in conjunction with the planning process. The first meeting may meet to discuss the effort underway and describe the results of the facility requirements phase. This meeting would likely be held at the time of a regularly scheduled meeting.

The second meeting may present the alternative development scenarios and solicit input from Airport Management/County Officials.

A third meeting may be a formal presentation of the plan's results. This meeting could be scheduled in conjunction with a regularly scheduled Airport or Local Government meeting.

B. Report Preparation – A report documenting the Rutherford County Airport Layout Plan (ALP) Update will include a full analysis and recommendations for development. The rationale for any unusual design features and/or modifications to FAA Airport Design Standards (if applicable) will be listed and explained. It will include several chapters of documentation and analysis including:

- Introduction
- Airfield Inventory
- Aviation Demand Forecasts
- Facility Requirements
- Meteorology and Capacity Analysis
- Environmental Overview
- Airport Plans
- Financial Plan

The Report will constitute a "road map" for the development of the Airport, discussing the support for the documented recommendations.

C. Documentation Distribution - Documentation of the Rutherford County Airport Layout Plan Update and ALP Report will be as follows:

- Six (6) copies of a Draft ALP Update Report including 11" x 17" versions of Airport Layout Plan Update Drawings for review by the Airport Management & County Officials, FAA, and NCDOA.

- Four (4) copies of a Draft full size (22" x 34") Airport Layout Plan Update Drawings for review by the Airport Management & County Officials, FAA, and NCDOA as needed. Electronic copies will be sent upon request to any of these parties.

- Up to eight (8) copies of the Final full size black-line ALP Update Plan prints to Rutherford County and NCDOA as needed.

- One (1) set of the Final Airport Layout Plan Report and Drawings on electronic media to NCDOA and Rutherford County.

- One (1) dry mounted Final ALP Plan Sheet Display Exhibit for use by the Airport Management & the County.

Task Product: Conducting and participation in meetings and coordination listed in Sub-task A and provision or the documentation as listed in Sub-tasks B & C.

Project Schedule: W.K. Dickson & Co., Inc. proposes to the following project schedule (subject to review agency response time):

- Draft Plans available for review and comment within seven months of notice to proceed;
- Draft Narrative Report available for review and comment within nine months of notice to proceed;
- Final Plans and Report submitted to Agencies and County for adoption within 12 months of notice to proceed.

April 7, 2015 2014090501

Joseph Barkevich, PE, AICP
W. K. Dickson & Co, Inc.
1320 Main Street, Suite 400
Columbia, SC 29201

RE: Proposal for Professional Photogrammetric Surveying and Mapping Services for Rutherford County Airport (FQD), Runway 1-19, near Rutherfordton, NC.

Joe:

Greenman-Pedersen, Inc., (GPI) is pleased to submit this proposal to W.K. Dickson & Co. Inc., (WKD), for providing airborne digital imagery acquisition with airborne GPS/IMU data collection, aero-triangulation, photogrammetric surveying and mapping, CAD, and digital ortho-rectification and mosaicing services in support for obtaining data delineating objects that may constitute an obstruction to aircraft navigation at the Rutherford County Airport (FQD), as well as provide an accurate base for aerial surveying services in supporting Airport Layout Plan (ALP) needs. Our project understating, management and communications, scope of services, schedule, compensation and terms of agreement are included herein.

Project Understanding

Pursuant to your request for Surveying Services to be performed for the above-mentioned project, please find our proposed scope of work and related fees herein. We understand that the purpose of this project is to accomplish and document as-built conditions for approximately 140 acres of the airport and surrounding property in providing a base model for an Airport Layout Plan (ALP) and supply data in 150/5300-18B format. This Aerial Survey Services provided herein by GPI for WKD will include and/or is for assisting with required ALP tasks:

1) Perform, document and report the tie to the NSRS per AC 150/5300-16A
2) Determine and validate runway length and width per AC 150/5300-18B
3) Determine Runway Profile at 50-ft stations per AC 150/5300-18B
4) Determine and document the horizontal extents of any stop ways per AC 150/5300-18B
5) Determine any stopway profiles per AC 150/5300-18B
6) Determine if the runway has any associated clearway per AC 150/5300-18B
7) Survey clearway to determine objects penetrating the slope per AC 150/5300-18B
8) Determine and document the taxiway intersection to threshold distance per AC 150/5300-18B
9) Determine or validate and document the position of navigational aids per AC 150/5300-18B
10) Perform or validate an airport airspace analysis per AC 150/5300-18B
11) Collect or validate and document airport planimetric data per AC 150/5300-18B
12) Perform or validate a topographic survey per AC 150/5300-18B
13) Collect and document runway and taxiway lighting per AC 150/5300-18B
14) Collect and document cultural and natural features of landmark value per AC 150/5300-18B
15) Collect position and type of runway and taxiway markings per AC 150/5300-18B
16) Locate, collect and document photo ID points per AC 150/5300-18B
17) Collect Imagery per AC 150/5300-17C

In addition, GPI will obtain all elevations of all airport features and above-ground structures and fixtures within the aforementioned delineated area(s) and include ground elevations data for use within the surface model.

A Professionally Licensed North Carolina Surveyor will be in responsible charge for all aspects of data retrieval, the submission and the upload of the survey to the FAA's Airports GIS website (FAA AGIS at https://airports-gis.faa.gov/airportsgis/). Additionally, the scope of our services will include all coordination with the National Geodetic Survey for approval, validation and verification of the final survey file. All data delivered will be in the localized coordinate system supplied by GPI, and adjusted to the North Carolina State Plane Coordinate System, NAD83(2011), NAVD88 (GEOID12A) and US Survey Feet unless otherwise requested by Airport Sponsor or Administrator.

The project will consist of 3D and 2D digital surveying and mapping services from airborne digital color imagery and localized ground control acquired by GPI for this project located in and around the Rutherford County Airport, North Carolina in 2015. The data will conform to WKD's design specifications and as provided in FAA Advisory Circulars AC 150/5300-16A, AC 150/5300-17C, and AC 150/5300-18B Change 1 for runways with Vertical Guidance. The survey, CAD, and mapping data will be collected and delivered in Microstation v8i, Autocad and/or ESRI ArcGIS; the image data will be delivered in TIF/TFW, MrSID and/or ECW formats and uploaded into the FAA AGIS for submittal and review by the Airport Sponsor. The project data per Table 2-1, Survey Requirements Matrix, for an Airport Layout Plan (ALP) will be collected, surveyed, processed and delivered to WKD in a cost effective and timely manner for both obstruction and instrument procedure development to occur.

Project Management and Communication

Communication with WDK, Airport Design Engineers, FAA officials, Airport Sponsor and local airport representatives/personnel will be through GPI's program and production manager, Timothy S. Schall. Timothy will be the point-of-contact (POC) for all contractual issues, negotiations and change orders, as well as for the technical management duties for the production team's day-to-day responsibilities. Timothy can be contacted at:

Greenman-Pedersen, Inc.	336-907-7114 (Phone
Attn: Timothy S. Schall, PLS, PPS, CP	336-382-7205 (Mobile)
7870 Thorndike Road	980-225-0336 (Fax)
Greensboro, NC 27409	tschall@gpinet.com

PROJECT LIMITS

The project limits for FQD are shown on the attached exhibits; it includes all of the VG approach surfaces for runway 1-19 and the designated airport property.

SCOPE OF SERVICES

The scope of services for this project consists of an airborne survey for FQD, including surrounding areas as outlined in the flight and control diagram. GPI anticipates the following specific tasks of work to be completed for this project:

Task 1 Flight and Control Planning

GPI will provide WKD with a finalized flight and control diagram prior to the project's commencement. This flight and control diagram will consist of a detailed flight plan for the use of a Leica RC-30 analog camera or DMC II digital camera with a Track Air flight management system. The control point locations identified on the flight and control plan will consist of locations of potential, existing NGS/NCGS monuments and additional control station required to adequately support the entire photo block to the accuracies needed within the final products. A copy of the flight and control plans will be uploaded to the FAA AGIS for review and acceptance by the Airport Sponsor and FAA personnel as provided in the Statement or Work (SOW) for Surveying Services per AC 150/5300-18B. Afterwards, a sufficient number of copies of the flight and control diagram will be delivered to WKD so that you and air traffic control personnel are properly aware of the mission outline at the time of flight.

Task 2 Aerial Targeting, Horizontal and/or Vertical Control Survey

All existing horizontal and vertical control monuments in and around the FQD suitable for use in this project will be located and targeted prior to the aerial imagery mission(s). If additional ground control locations are necessary for the project, then a Class "C" Control Survey (or better) will be accomplished by appropriate Global Position Survey (GPS) data collection methods and supplied by WKD to GPI. All data will be adjusted to and delivered in the North Carolina State Plane Coordinate System, NAD83 (NSRS 2011), NAVD88 (GEOID12A), and US Survey Feet, unless otherwise requested by the Airport Sponsor.

Point locations within the aerial imagery data for these control stations will consist of nylon targeting materials, paints, photo identifiable features and/or reflectors with proper contrasts and reflectivity properties suitable to render them easily detectable.

Supplemental Aerial and/or Ground Survey Requirements for ALP data per AC 150/5300-16A, -17B, -18B may include:

- The airport geodetic control validation of the existing airport PACS and SACS stations or establish temporary airport control according to the guidelines established in AC 150/5300-16A
- Additional Photo ID/ check pts (survey diagram attached)
- Collection of 50' vertical profiles for the runways being considered for the instrument approach
- Collection of the position, elevation, and where required the appropriate navigational aid perpendicular point of all electronic and visual navigational aids (NAVAIDS) located on the airport and associated with any current instrument approach servicing the airport
- Conversion of existing boundary data
- Complete map checks for feature attribute data and update the final map file attribution
- Although it is very unlikely to occur, there may be an obstacle or planimetric feature that will require collection in the field if unable to be collected photogrammetrically

Task 3 Digital Color Aerial Imagery Acquisition and Processing

GPI will accomplish the aerial flights utilizing ABGPS control and a precision aerial mapping camera during leaf-on conditions with natural color film, or with a precision digital imaging sensor at an altitude to acquire the base imagery at a resolution equal to or better than the natural color film flight outlined below:

- **Flight 1**: With weather permitting during leaf-on conditions, 8 Flight Lines with approximately 144 Exposures of color aerial imagery will be acquired at a 1"=800' negative scale (4,800' AGL) utilizing a minimum of 60% forward lap and 35% side lap coverage. Upon completion of the mission, the film and images will be reviewed for completeness and free of scratches, distortions, lint and other anomalies. This mission is to support ALP and to create, update or enhance current AC 150/5300-18B mapping data submissions for the ALP surveys.

GPI will closely monitor weather and air traffic conditions before and during the mission, and keep a good positive communication with air traffic control at all times during flight. During and upon completion of the mission, the flight crew will check their flight log data from our Track Air flight management system for complete assurance of adequate coverage of the project site.

Upon completion of the film negative or digital image processing, the individual images will be reviewed for completeness and free of scratches, distortions, lint and other anomalies. All images of the entire photo block will be scanned at 12 to 14 microns for use in all mapping and digital orthoimagery production to insure all products contain the geospatial positional accuracy required for this site from the negative scale of photography and/or pixel resolution of the digital imagery obtained.

Task 4 Airborne LIDAR Data

GPI understands that there is suitable, existing NCFMP LIDAR DEM data which can be made available for use for any and/or all orthoimagery development and as a surface model base for determining object heights above ground level for any automated processes. This data will be reviewed, QA/QC, enhanced, and utilized in whole or at least in part for orthoimagery development and other mapping needs based upon the project needs.

Task 5 Digital Imagery Aero-Triangulation

Finalized ABGPS, digital images and survey control are collected to perform a bridging process of the aerial flight. GPI will utilize INPHO MATCH-AT software to perform a supervised auto-correlation for precise multi-ray tie points matching and integrated bundle adjustment.

MATCH-AT provides highly precise automatic digital aerial triangulation, based on the advanced and unique image processing algorithms by INPHO. Tie points are automatically collected in image areas best contributing to the strength and quality of the block. Additionally, digital measurements of all pass points, tie points, and control points (or any other required or desired point) will be reviewed, re-measured and adjusted as necessary for an adequate bundle adjustment and acquiring the overall desired sigma of the entire digital image block. These processes can be accomplished in both stereoscopic and monoscopic modes within the Match-AT software. During the adjustment, the final ABGPS EO data may be entered and used in the final block solution. Control targets that may have been moved or are not fitting the final adjustment will be identified and determined whether they are usable within the final bundle adjustment. If required, additional survey control may be established to ensure there are no areas of weakness in the control network. The aero-triangulation data is processed as a Fully Analytical Aerial Triangulation (FAAT) with accuracy criteria in accordance with NSRS and FGDC specifications. Once there is an acceptable final block adjustment, it will be recorded and used for all further imagery and mapping production update activities.

Task 6 LIDAR Data Post-Processing

Digital review of the existing NCFMP post-processed LIDAR data will be accomplished utilizing a DATEM SUMMIT Evolution Softcopy workstation with Airfield 3D capabilities for DATEM Capture software for ESRI or Microstation v8i. If there happen to be gaps in the LIDAR data extending from obstructions or other phenomena, we would then use photogrammetric processes to fill in those gaps.

Upon receipt of the data, we will check it to make sure it's in the correct location geographically, study the point spacing and see if the intended project limits are covered. Upon satisfaction, we will prepare the file for photogrammetric production processes.

Task 7 Digital Planimetric/Topographic Features

3-D Digital measurements of all planimetric and topographic features within the entire photo block(s) and within the airport boundary and airspace surface limits will be surveyed and mapped utilizing a DATEM SUMMIT Evolution Softcopy workstation with Airfield 3D capabilities for DATEM Capture software for ESRI and Microstion v8i. All topographic spot elevations or polygons for outlining obstruction surfaces will be generated and reviewed in a 3D viewing stereo-workstation capable of visualizing both image and point data sets simultaneously.

Obstructions to navigation will constitute any object:

- 500 feet or more above ground level at object site
- penetrating any imaginary surface as a function of the precision of the runway per -18B, 2.7.1.1 and 2.7.1.2
- penetrating the terminal obstacle clearance area
- penetrating the enroute obstacle clearance area per -18B, 2.7.1.1 and 2.7.1.2

Mapping Products:

- Flight 1 - 1" = 800' imagery
  - 2' contours for the airport and surrounding property for required for ALP
  - 0.5' pixel Color Digital Orthoimagery
  - 1" = 40' Planimetric Mapping for the airport and surrounding property for ALP
  - Limited Landmark Feature Mapping as outline in AC 150/5300–18B - 2.3.4
  - Obstruction obstacle mapping to update the VGPS, VGRPS and VCPCS Surfaces

All CAD services will be imported/exported, originated, reviewed, edited and/or modified utilizing Microstation v8i software. Each layer will conform to specifications as required for use by WKD personnel. Any data supplied to GPI from previously collected projects will be reviewed to see if it meets the specified standards for this project prior to inclusion in any process for use.

Task 8 Digital Orthophotography (optional)

GPI will load all required images into a orthophoto project folder along with the finalized aero-triangulation results. Then, each individual image of the entire photo block will be ortho-rectified at a 1.0-foot pixel resolution and/or 0.5-foot pixel resolution to a processed and reviewed digital surface model suitable for the overall image mosaic within GPI's INPHO OrthoMaster software. Within the OrthoMaster software, the rotation each image is verified for each flight strip, clipping boundaries if needed are introduced, and images are reviewed for displacement, edge matching and overlap coverage to ensure no holes in the image data exist. All digital orthophotography tiles and mosaics for this project will be originated utilizing INPHO OrthoVista software.

All images will be loaded into a single image block for image analysis and production purposes. This will allow the OrthoVista to examine the overall quality and diversity of the histograms for each individual image. Slight variations along the seam edges during mosaic processing will be corrected as needed with algorithms designed to enhance the global tilting and radiometrix for the overall project.

Seam lines are automatically selected by OrthoVista and interactively reviewed/QAQC within the Seam Editor to achieve best mosaic match results. The Project's tile schematic will be loaded into the orthophoto project and all images will be reviewed for completeness, distortions, color balancing and other mosaic anomalies prior to being inserted into the final mosaic process. During the processing and writing of the final orthophoto image tiles, adaptive feathering techniques are introduced based upon the level of image detail (rural, suburban, or urban) to render the image with no trace of seam line areas within the final image.

GPI will provide an image quality peer review prior to finalizing deliverables. Following the completion of the initial image adjustments described above, the radiometric corrections will be independently reviewed on a 10% sample of imagery. This will confirm that the imagery meets or exceeds the quality-oriented technical specifications required by WKD. Any discrepancies such as color balancing issues or rectification artifacts will be identified and addressed.

DELIVERABLES

Based on our understanding of WKD's requirements, GPI will provide the deliverables below in the formats noted as part of our scope of services. If additional deliverables are requested, or if deliverables are required to be delivered in alternate formats, those requests will be considered and offered as additional services.

Deliverables for ALP Survey Services	*Format(s)*	*Amount*
• Aero-Triangulation Report	PDF	1 each
• Final Planimetric CAD Data in 3D/2D at 1"=40'	DGN/DWG/ESRI	1 set each
• Final Topographic CAD Data in 3D/2D at 1"=40'	DGN/DWG/ESRI	1 set each
• Final Color digital image tiles at 0.5-foot pixel	TIF/TFW & MrSID	1 set each
• Final Color digital image mosaics at 0.5-foot pixel	TIF/TFW & MrSID	1 each
• Final Planimetric CAD Data in 3D/2D at 1"=100'	DGN/DWG/ESRI	1 set each
• Updated Obstruction CAD Data	DGN/DWG/ESRI	1 set each
• Original Aerial Imagery used for project per 150/5300-17C	TIF	1 set each
• Imagery Flight Report used per AC 150/5300-17C	PDF/XLS	1 set each
• Camera Calibration Report per AC 150/5300-17C	PDF/XLS	1 set each
• Interim Transmittals and Letters per AC 150/5300-17C	PDF/XLS	1 set each
• All CAD File Data in DWG/DGN and/or ESRI Format	DGN/DWG/ESRI	1 set each
• FGDC Compliant Metadata per 150/5300-18B		1 set each

All final digital files will be delivered on CD, DVD or uploaded via FTP to WKD. All ALP related deliverables will be made via the FAA AGIS (https://airports-gis.faa.gov/airportsgis/) as directed.

GENERAL REPORTING AND CONTACT WITH WKD AND FQD AIRPORT PERSONNEL

Close communication with WKD and Airport personnel will be conducted throughout the entire survey process, along with proper FAA reports and document submissions for the ALP & AS&AAA submittals. This includes personnel time and documentation to be provided for: all Project Reporting Phases, Survey Data Reports, Aerial Survey Operations, and Preparation and Deliverable Activities, along with obtaining the necessary approvals during each of these tasks as authorized by WKD.

ADDITIONAL SERVICES

Any services not reflected in the Scope of Services section of this Agreement, including but not limited to the following, are not included in this Agreement. Surveyor may elect to provide or coordinate these services, if requested, but they will be considered additional services.

These additional services can be performed as mutually agreed upon by the Client and Surveyor and documented by a written addendum to this Agreement. Additional Services include:

- Boundary and topographic surveys, including tree surveys
- Survey of off-site utilities, bridges or roadways
- Special easements / maps for common areas
- Special easements / maps for utility purposes
- Subsurface utility locating services and subsurface utility engineering (SUE) services
- Wetland delineation
- Wetland mapping
- Title Research/Title Reports
- ALTA surveys
- Off-site utility surveys
- Right of way / easement negotiations / acquisition
- Project schedule extensions beyond our control
- Providing project deliverables in formats other than those indicated

ACCURACY STANDARDS

All methods and procedures utilized for all services herein will be accomplished in accordance with and will conform to Federal Geographic Data Committee (FGDC) Geospatial Positioning Accuracy Standards (Chapter 3) for positional accuracy requirements for each image scale, unless otherwise specified. All data delivered will be in the localized coordinate system supplied by GPI, and adjusted to the North Carolina State Plane Coordinate System, NAD83(2011), NAVD88 (GEIOID12A) and US Survey Feet. All aerial and field survey work will be undertaken and/or under the direct supervision of a professional surveyor or photogrammetric surveyor licensed in the state of North Carolina.

COMPENSATION AND BILLING

FIXED FEE
The work will be billed on a fixed price basis for the scope of work described and as outlined in any subsequent agreement made by purchase order from WKD with GPI based upon the scenario selected.

Phase 1 – Tasks 1 through 3.....$ 8,480.00
Color Imagery Acquisition for 1"=800' Negative Scale Imagery (leaf-on) and digital imagery negative scanning at 12um; targeting, horizontal and vertical ground control (supplied by WDK)

Phase 2 – Tasks 4 through 6.....$ 5,040.00
Digital Aero-Triangulation, Imagery and Remote Sensing Data processing

Phase 3 – Task 7 through 8.....$31,490.00
1"=50' Scale ALP Planimetric/Topographic Mapping with 2' CI, Consist of digital planimetric/topographic data collection from the 1"=800' Negative Scale Imagery for the extended airport boundary, including runways, taxiways and ramp areas, and delivery of compliant data and reporting to FAA per ACs; digital data collection for the AS&AAA surfaces, and delivery of compliant data and reporting to FAA per ACs and their respective objectives/tasks; digital orthophotography at 0.5-ft or 1.0-ft pixel resolution (1'=800' scale imagery); and delivery of compliant data and reporting to FAA per ACs.

***Total – Airport Layout Plan (ALP) 150/5300-18B compliant*.....$45,010.00**

SCHEDULE OF SERVICES

We will perform the work described in the above Scope of Services as expeditiously as practical to meet a desired schedule (tentatively within 60-90 days from notice to proceed for the ALP Survey project).

We look forward to working with you on this project and appreciate this opportunity to serve WKD needs. If you have any questions or need additional information, please feel free to call us.

Best regards,

Greenman-Pedersen, Inc.

Timothy S. Schall, PLS, PPS, CP
Vice-President
Remote Sensing & Surveying

PROJECT TITLE: ALP-Update- Rutherford County Airport						DATE PREPARED: 6-11-15						AVIATION NUMBER:		
PREPARED BY: JAL						TIP NUMBER:						WBS NUMBER:		
		Employee Classifications												
TASK NUMBER	PHASE AND TASK DESCRIPTION	Principal	Program Manager	Sr. Project Manager	Project Manager	Sr. Project Engineer	Project Engineer	Sr. Civil Designer	Civil Designer	Grant Planner			Admin Manager	SUB-TOTAL
	SPECIAL SERVICES													
	PHASE - I AIRPORT REQUIREMENT STUDIES													
1	Study Design	6.00	10.00				12.00		6.00				4.00	38.00
2	Data Collection and Inventory	7.00	16.00				22.00		18.00				6.00	64.00
2a	Aerial Photography and Photogrammetry- (SEE EXPENSE TAB)													
2b	As-Built Layout Plan	2.00	10.00				16.00		28.00				2.00	58.00
3	Determination of Long Term Facilities Requirements	4.00	10.00				20.00		30.00				6.00	70.00
4	Rwy Ext. Justification Data Collection/Analysis	8.00	24.00				36.00		14.00				24.00	106.00
														0.00
	TOTAL WORKDAYS/CATEGORY:	22.00	70.00	0.00	0.00	0.00	106.00	0.00	96.00	0.00	0.00	0.00	42.00	336.00
	RATES PER HOUR:	$72.10	$60.26	$66.93	$33.94	$44.00	$38.62	$35.83	$35.94	$38.00			$26.78	
	PAYROLL BURDEN:	$1,586.20	$4,218.20	$0.00	$0.00	$0.00	$4,094.38	$0.00	$3,447.44	$0.00	$0.00	$0.00	$1,124.76	
	TOTAL WORK HOURS:	336.00												
	TOTAL PAYROLL BURDEN:	$13,941.38												
	GENERAL OVERHEAD @ 169.20.00 %:	$23,588.81												
	SUBTOTAL:	$37,530.19												
	COMPARATIVE FEE @ 9%:	$3,377.72												
	Cost of Capital @ 0.43 %	$59.95												
	TOTAL:	$40,967.86												
	DIRECT EXPENSES:	$61,043.00	From Expenses Tab											
	PRIME GRAND TOTAL:	$102,010.86												
	Sub Consultant TOTAL:	$0.00												
	GRAND TOTAL:	**$102,010.86**												

PROJECT TITLE: ALP Update - Rutherford County Airport	DATE PREPARED: 6-11-2015	AVIATION NUMBER:
PREPARED BY: ZAL	TIP NUMBER:	WBS NUMBER:

TASK NUMBER	PHASE AND TASK DESCRIPTION	Employee Classification: Principal	Program Manager	Sr. Project Manager	Project Manager	Sr. Project Engineer	Project Engineer	Sr. Civil Designer	Civil Designer	Grant Adviser			Admin Manager	SUB-TOTAL
	SPECIAL SERVICES													
	PHASE - II AIRPORT PLANS													
5	Airport Layout Plan/Property Map	6.00	30.00				52.00		60.00				10.00	158.00
6	Airport Airspace Drawing	2.00	2.00				6.00		32.00				2.00	44.00
7	Inner Portion of the Approach Surface Drawing	2.00	2.00				6.00		24.00				2.00	36.00
7a	Aerial Topography and Obstruction Analysis	2.00	2.00				10.00		24.00				2.00	40.00
8	Runway Departure Surface Plan(s)	2.00	2.00				12.00		24.00				2.00	42.00
9	Terminal Area Plan(s)	4.00	14.00				22.00		28.00				4.00	72.00
10	Land Use Plan	2.00	6.00				8.00		16.00				2.00	34.00
	TOTAL WORKDAYS/CATEGORY:	20.00	58.00	0.00	0.00	0.00	116.00	0.00	208.00	0.00	0.00	0.00	24.00	426.00
	RATES PER HOUR:	$77.10	$60.26	$66.31	$53.98	$44.56	$38.93	$35.65	$30.29	$35.00			$26.76	
	PAYROLL BURDEN:	$1,442.00	$3,495.08	$0.00	$0.00	$0.00	$4,481.08	$0.00	$6,321.12	$0.00	$0.00	$0.00	$642.72	
	TOTAL WORK HOURS:	426.00												
	TOTAL PAYROLL BURDEN:	$16,382.00												
	GENERAL OVERHEAD @ 169.20.00 %:	$27,718.34												
	SUBTOTAL:	$44,100.34												
	COMPARATIVE FEE @ 9%:	$3,969.03												
	Cost of Capital @ 0.43 %	$70.44												
	TOTAL:	$48,139.82												
	DIRECT EXPENSES:		From Expenses Tab											
	PRIME GRAND TOTAL:	$48,139.82												
	Sub Consultant TOTAL:	$0.00												
	GRAND TOTAL:	**$48,139.82**												

PROJECT TITLE: ALP Update - Rutherford County Airport		DATE PREPARED: 4-11-2015	AVIATION NUMBER:
PREPARED BY: JAL		TIP NUMBER:	WBS NUMBER:

TASK NUMBER	PHASE AND TASK DESCRIPTION	Employee Classifications												SUB-TOTAL
		Principal	Program Manager	Sr. Project Manager	Project Manager	Sr. Project Engineer	Project Engineer	Sr. Civil Designer	Civil Designer	Grant Planner			Admin Manager	
	SPECIAL SERVICES													
	PHASE- III FINANCIAL PLAN/DOCUMENTATION													
11	Schedules Development	2.00	12.00				10.00		4.00				2.00	30.00
12	Estimates of Development Costs	2.00	16.00				8.00		6.00				2.00	34.00
13	Documentation (Coordination/Document Prep.)	10.00	36.00				52.00		16.00				26.00	140.00
														0.00
	TOTAL WORKDAYS/CATEGORY:	14.00	64.00	0.00	0.00	0.00	70.00	0.00	26.00	0.00	0.00	0.00	30.00	204.00
	RATES PER HOUR:	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	
	PAYROLL BURDEN:	$1,089.45	$3,856.64	$0.00	$0.00	$0.00	$2,799.18	$0.00	$390.14	$0.00	$0.00	$0.00	$803.45	
	TOTAL WORK HOURS:	204.00												
	TOTAL PAYROLL BURDEN:	$9,163.68												
	GENERAL OVERHEAD @ 169.20.00 %:	$15,504.95												
	SUBTOTAL:	$24,668.63												
	COMPARATIVE FEE @ 9%:	$2,220.18												
	Cost of Capital @ 0.43 %	$39.40												
	TOTAL:	$26,928.21												
	DIRECT EXPENSES:	$0.00	From Expenses Tab											
	PRIME GRAND TOTAL:	$26,928.21												
	Sub Consultant TOTAL:	$0.00												
	GRAND TOTAL:	**$26,928.21**												

DIRECT EXPENSES

0						
PREPARED BY: JAL				AVIATION NUMBER:		
TIP NUMBER:				WBS NUMBER:		
DATE PREPARED:				REVIEWED BY UNIT HEAD ON:		
GENERAL PROJECT WORK:	ITEM	QTY	DESCRIPTION		UNIT COST	
	Travel:					
	Sedan	8	Trip(s) @	400 miles @	$0.565	$1,808.00
	Sedan		Trip(s) @	miles @	$0.565	$0.00
	Carry All		Trip(s) @	miles @	$0.585	$0.00
	Carry All		Trip(s) @	miles @	$0.585	$0.00
	Car Rental			days @	$45.00	$0.00
	Gas for Rental			miles @	$0.200	$0.00
	Per Diem:	3	Breakfast		$8.20	$24.60
		6	Lunch		$10.70	$64.20
		6	Dinner		$18.40	$110.40
		3	Lodging (on lump sum Incl. taxes)		$73.50	$220.50
	Reproduction:	375	8 1/2 x 11 Xerox Copies @		$0.04	$15.00
		60	11 x 17 Xerox Copies @		$0.10	$6.00
		2	Blueprints - 8 1/2 x 11 @		$0.35	$0.70
		150	Blueprints - 42 x 72 @		$1.30	$195.00
		1330	Bond - 8 1/2 x 11 @		$0.42	$558.60
			Bond - 34" x 68" @		$3.50	$0.00
		150	Vellum		$3.00	$450.00
			Stick-Ons		$1.00	$0.00
		40	Cover(s) @		$0.50	$20.00
		20	Binder(s) @		$0.50	$10.00
			Mylar - 8 1/2 x 11 @		$5.90	$0.00
			Mylar - 3' x 4' @		$21.00	$0.00
	Film and Developing:		Roll(s) @		$20.00	$0.00
				Subtotal		$3,483.00
MAPS AND DOCUMENTS:	ITEM	QTY	DESCRIPTION		UNIT COST	
	County Tax Maps:		Map(s) @		$7.00	$0.00
	USGS Maps:		Map(s) @		$7.00	$0.00
				Subtotal		$0.00
Miscellaneous Other:	Item	Amount	Description		Cost Per	
						$0.00
	Aerial Photography,Photogram.		Subcontracted			$0.00
	Topo, Obstr.	1			$45,010.00	$45,010.00
	Control Surveys	1			$12,550.00	$12,550.00
		0				$0.00
				Subtotal		$57,560.00
				TOTAL		**$61,043.00**

*** Sum of all plots**