AGENDA
Wednesday, August 12, 2015
Colorado Aeronautics Division
5126 Front Range Parkway | Watkins, CO 80137
Joseph H. Thibodeau Room | 1:00 p.m.

PLEDGE OF ALLEGIANCE

1. CALL TO ORDER

2. APPROVAL OF MEETING MINUTES
   2.1. July 8, 2015 - General Meeting

Action Needed

3. AMENDMENTS TO THE AGENDA

4. BOARD MEMBER REPORTS

5. PUBLIC COMMENTS

6. DIRECTOR’S REPORT - Dave Ulane

7. DAF UPDATE ITEMS - Mike Krochalis
   7.1. Financial Update
   7.2. Aeronautics Finance Position Update

8. PARAGON PERFORMANCE AUDIT UPDATE - Dave Ulane

9. 2015 DIA SURPLUS SALE RECAP - Kaitlyn Westendorf

10. AWOS PROGRAM UPDATE - Christine Eldridge

11. AIRPORT GRANTS
    11.1. FY15 GRANT UPDATE - Dave Ulane
    11.2. FY16 GRANT OUTLOOK - Dave Ulane

12. WIDE AREA MULTILATERATION - PHASE III UPDATE - Bill Payne

Action Needed

13. WIMS AUDIT ACCEPTANCE - Dave Ulane

14. SEAPLANES IN COLORADO UPDATE - David Ulane

15. PROPOSED CALENDAR
    • Wednesday, September 9, 2015 - Rifle Airport - Rifle, CO
      o Board & Staff Workshop - 9am to Noon
      o Regular CAB Meeting - 1pm
    • Wednesday, October 14, 2015 - Aeronautics Offices - Watkins, CO

16. OTHER MATTERS BY PUBLIC & MEMBERS

17. ADJOURNMENT
MINUTES
Board Meeting
Wednesday, July 8, 2015 | 1:00 pm
Division of Aeronautics
5126 Front Range Parkway | Watkins, CO 80137
Joseph H. Thibodeau Room

MEMBERS PRESENT:

Ray Beck   Chairman
Ann Beardall   Vice-Chair
John Reams   Secretary
Jeff Forrest arrived at 1:47 pm
Robert Olislagers
Joe Rice
William "T" Thompson

OTHERS PRESENT:

David Ulane CDOT - Division of Aeronautics Director
Christine Eldridge CDOT - Division of Aeronautics
Todd Green CDOT - Division of Aeronautics
TK Gwin CDOT - Division of Aeronautics
Andy Karsian CDOT - Division of Government Relations
Mike Krochalis CDOT - Division of Accounting & Finance
Eric Richardson CDOT - Division of Accounting & Finance
Shahn Sederberg CDOT - Division of Aeronautics
Scott Storie CDOT - Division of Aeronautics
Kaitlyn Westendorf CDOT - Division of Aeronautics
Scott Young CDOT - Division of Accounting & Finance
Walt Barbo Colorado Pilots Association
Walt Bell Colorado Pilots Association
Alan Foutz Senator Cory Gardner's Office
Ray Hawkins Seaplane Pilots
Lorie Hinton Centennial Airport and CAOA
Carl Mattson Colorado Pilots Association
Leo Milan Office of the Attorney General
Aaron Repp Centennial Airport

Pledge of Allegiance
1. CALL TO ORDER
   
   Meeting commenced at 1:00 pm.

2. APPROVAL OF MEETING MINUTES
   
   Ann Beardall made the MOTION to approve the minutes from June 10, 2015 and Joe Rice seconded.
   
   The MOTION carried unanimously.

3. AMENDMENTS TO THE AGENDA
   
   Ann Beardall made a MOTION to add an agenda item to discuss Captain Emily Warner and William "T" Thompson seconded.
   
   The MOTION carried unanimously.
   
   Ray Beck determined that this topic will be agenda item 5.5

4. BOARD MEMBER REPORTS
   
   Joe Rice reminded the Board of the upcoming Colorado Space Business Roundtable (CSBR) road trip to northeastern Colorado, July 20th through the 24th. Ann Beardall said that Colorado Pilots Association will host the Colorado Aviation Meet & Greet at Centennial Airport on August 8th. John Reams spoke about a Colorado Office of Economic Development and International Trade (OEDIT) project to identify a site for drone testing. William "T" Thompson spoke about his recent visit with the new chairman of the Colorado Springs Municipal Airport Advisory Committee. Robert Olislagers thanked Ann and John for serving on the selection committee tasked with hiring the new Aeronautics Director. Robert was just invited by the Association of California Airports to do a presentation in September on the Colorado Aeronautical Board (CAB) and how Colorado funds the airports. Ray Beck mentioned that the Governor signed a proclamation declaring June as General Aviation Month. Ray said that the runway project at Yampa Valley Regional Airport is now finished. Ray concluded by saying he will be giving a presentation to the Yampa Valley Regional Airport Board meeting in August about the CAB and the Division of Aeronautics programs.

5. PUBLIC COMMENTS
   
   There were no public comments.

5.5 Captain Emily Warner
   
   Ann Beardall said that Emily Warner is being honored at the Granby Airport on Saturday, July 11th, for her many accomplishments and contributions to aviation. She was the first member of the Colorado Pilots Association and the first female Captain for a major airline. Ann will be attending the ceremony on Saturday and would like to present Emily with a certificate on behalf of the Colorado Pilots Association and the Colorado Aeronautical Board. William "T" Thompson made
the MOTION to officially endorse the certificate to Captain Emily Warner and John Reams seconded.

The MOTION carried unanimously.

6. DIRECTOR'S REPORT

David Ulane started by thanking the Board for the opportunity to serve as the Director. David added that he is incredibly appreciative of the help that the staff has given him and is glad to be here. David spoke about the some of the people and entities that he has already met with and those that he will be meeting with in the near future. He talked briefly about the performance audit and the cash management process. David is excited to expand our presence at pilot and aviation events. Ray Beck said the CAB is excited to have David as the new Director.

7. DIVISION OF ACCOUNTING & FINANCE (DAF) UPDATE ITEMS

7.1 Financial Update

Mike Krochalis said that we are still in the process of closing out Fiscal Year 2015 (FY15). All invoices and grant payments continue to be paid promptly. Aviation Sales Tax Rebates were processed for June in the amount of $975,366.42. DAF is continuing to participate in the interviews being conducted by Paragon for the performance audit. In June, the CAB approved the reallocation of $135,000 to the Administrative Budget and DAF has successfully completed that budget move. Mike said that DAF submitted the Aeronautics "Out of State Travel Request Plan" to CDOT in the amount of $18,850. Mike will be working on the implementation of the proposed Cash Forecasting Model with CDOT and the consultant from Dye Management Group. Mike said that his current focus is on getting the Excise Tax disbursements out to airports. As of July 1st, the cash balance available in the Aviation Fund was $225,552, which already accounts for $2.384 million of outstanding or uncashed warrants. As of today, the available cash balance is $311,000. Mike said that sales tax received in the Aviation Fund in May was $1.5 million, with a FY15 year to date total of $27 million. After some discussion about the budget and how the loan agreement with the State Controller will work, it was agreed upon that DAF would provide information to the CAB about the loan agreement terms and notify them when advances were made, how much is interest, repayment plans and the like.

7.2 Aeronautics Finance Position Update

DAF is pursuing advertising the vacant position. The position description has been drafted and is currently with the Appointing Authority for review and approval.

7.3 Performance Audit Update

Mike said that Paragon is finishing their interviews with staff, members of the CAB and representatives of some Colorado airports. Paragon has scheduled a meeting with staff to review some of the preliminary observations and will then produce their final report within the next few weeks. Eric Richardson said that final recommendations are due to CDOT by August 1st, and Paragon hopes to present their findings to the CAB at the August Board Meeting.
7.4 FY15 Rollforwards

Mike said that since the accruals for FY15 haven’t been finalized yet, it is too soon to know what dollar amount needs to be rolled forward. Therefore, the rollfowrards will be acted upon at the August Board Meeting.

8. YUMA MUNICIPAL AIRPORT SUPPLEMENTAL FUNDING REQUEST 15-2V6-01

Todd Green said that on April 17th, the CAB approved to match federal funding to Yuma for their runway reconstruction project. The amount of state funding awarded was $257,748. The project was bid in May and only one bid was submitted, which was $1.6 million higher than the engineer’s estimate of just over $4 million. Armstrong Consultants worked diligently with the bidder to reduce the overrun as much as possible and were able to reduce it by nearly $700,000, while still maintaining all three original schedules of the project. After negotiations, the total cost of the project came in at $5,358,995. The airport is requesting an additional $10,201 of state funds to match the additional $183,620 of federal funds required to complete the project. William “T” Thompson made the MOTION to approve the additional $10,201 of state funds to the 2015 Yuma grant for runway reconstruction and Robert Olislagers seconded.

The MOTION carried unanimously.

At this time, Jeff Forrest joined the meeting. Ray Beck gave Jeff an opportunity to give his Board Member Report. Jeff said that he attended the Denver International Airport 20th Anniversary Celebration.

9. FAA AIR TRAFFIC CONTROLLER PRIVATIZATION & USER FEE DISCUSSION

Robert Olislagers said that he doesn’t have a lot to report on this, since the House delayed release of the proposed change. Robert said we won’t know what the proposed change will consist of and how it will affect general aviation until the bill comes out. Ray Beck requested that this topic be added as an on-going agenda item for next month’s CAB meeting and Robert agreed to do that.

10. INTERN PROGRAM UPDATE/OVERVIEW

Todd Green said that the intern program has been in existence for approximately 18 years and has been very successful. Since 2010, we have funded 41 internships at nine different airports, totaling $601,000 in state funding. Over half the staff at the Division started as interns, to include the new Director, David Ulane. Todd showed the Board a map that illustrated 45 aviation professionals who began as interns at Centennial Airport and are currently in 17 states, doing various jobs throughout the industry. At this time, there are six Colorado airports who have interns partially funded by the Division of Aeronautics. At this time, Todd introduced Aaron Repp, who is a current intern at Centennial Airport. Aaron is about half way through his internship at Centennial and gave a synopsis of his experience with the program. The Board was pleased to hear from Aaron and about the success of the Intern Program. William “T” Thompson wanted to make sure that we ensure that the word gets out about this program to women and minorities. A few of the Board members shared suggestions on how we could better advertise this program.
Jeff Forrest suggested that one way to do that would be to communicate this to Tuskegee Airman and Shades of Blue.

11. WIMS AUDIT UPDATE

David Ulane said that he spoke with Barbara Gold with CDOT Division of Audit and since the Audit Committee will not have a quorum at their July meeting, this topic will be postponed to their August meeting. Subsequently, the findings of this audit will not be available until after they meet in August.

12. SEAPLANES IN COLORADO

David Ulane said he is excited to have this topic on the agenda. David gave a history of the statewide ban of seaplanes on Colorado waters. Leo Milan said there is very little statutory authority or language related to seaplanes other than a reference when vessels are mentioned. Leo was asked if the Board can take a stand on this and he believes they can, based on the CAB Governing Documents. Ray Beck read the biography of Ray Hawkins and then introduced him to the Board and the audience. Ray Hawkins made a presentation on supporting changes in the State of Colorado to accommodate seaplanes. After a brief discussion by the Board, David said that he would begin the process by setting up a meeting with Colorado Parks and Wildlife for a discussion between the state offices.

13. PROPOSED CALENDAR

The next meeting is scheduled for Wednesday, August 12th, 1:00 pm at the Division Offices. The September meeting is tentatively scheduled for Wednesday, September 9th at the Rifle Garfield County Airport.

14. OTHER MATTERS BY PUBLIC & MEMBERS

There were no other matters.

15. ADJOURNMENT

Ann Beardall made the MOTION to adjourn the meeting and William "T" Thompson seconded. The MOTION carried unanimously. The meeting adjourned at 3:01 pm.
DATE: Thursday, August 06, 2015  
TO: Colorado Aeronautical Board  
FROM: CDOT, Department of Accounting and Finance (DAF)  
SUBJECT: DAF Update for Aeronautics Division

Recent DAF Support Accomplishments Since Previous CAB Update

- $82,227 in excise tax refunds to airports were processed for the April period.
- $80,715 in excise tax refunds to airports were processed for the May period.
- $1,193,863 in Aviation sales tax refunds were processed for the June DOR reporting period.
- DAF continues to participate with Director Ulane in formulating solutions Paragon Performance Audit recommendations.
- Continuing with implementation of cash forecasting model with Aero Mgt/CDOT/OFMB staff.

FY2015 Year End Accounting Close Status

- Not complete yet. When it is, the Division will provide final 2015 year end financials.
- State CORE system transactions are still being reconciled.
- Revenue and expense roll forwards have not been completed by State/CDOT yet.
- FY15 departmental budget roll forward amounts to be calculated by end of September, and processed in the financial system in October.
- The preliminary FY15 (July 2014 – June 2015) Total Revenue amount for the Division is $31.591M.

Aeronautics Fund ‘Loan’ Summary

- It is estimated that the Aviation fund was in a negative position during July 2015, however the State Treasurer report for that period indicating the exact amount is not available at the time of this memo (they are still in the accounting close process).
- As outlined in previous Board communications, the State Treasurer allows the Aviation fund to operate with a negative cash balance. There are no loan ‘advances’ to the fund per se.
- The Aeronautics Division is required to pay a low, variable, daily average balance interest rate on the negative balance throughout the month. The variable interest rate is set by the Department of Treasury, and is based on current market information. Interest charge reporting is provided to CDOT by the State Treasurer, monthly, one month in arrears.

Aeronautics Finance Support Position Update

The position description has been drafted and is currently with the Appointing Authority for review and approval.
<table>
<thead>
<tr>
<th>AIRPORT</th>
<th>Number of Pieces Sold</th>
<th>Number of Airports</th>
<th>2015 Dia Surplus Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>22</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AIRPORT</th>
<th>ROUND 1</th>
<th>ROUND 2</th>
<th>ROUND 3</th>
<th>ROUND 4</th>
<th>AIRPORT TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granby</td>
<td>W-02-048</td>
<td>2006 CHEV K-3500 TRUCK/DUMP $8,000.00</td>
<td>W-11-030</td>
<td>2003 OSH HB2718 22' HS RUNWAY SWEEPER $20,000.00</td>
<td>Total: $8,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $6,600</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $1,400</td>
</tr>
<tr>
<td>Eagle</td>
<td>W-11-034</td>
<td>2003 OSH HB2718 22' HS RUNWAY SWEEPER $20,000.00</td>
<td>W-11-032</td>
<td>2003 OSH HB2718 22' HS RUNWAY SWEEPER $20,000.00</td>
<td>Total: $60,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $36,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $24,000</td>
</tr>
<tr>
<td>Salida</td>
<td>W-21-039</td>
<td>1999 TKS MT5 TRACTOR/MUNICIPAL $5,000.00</td>
<td></td>
<td></td>
<td>Total: $5,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $4,400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $1,600</td>
</tr>
<tr>
<td>Fort Morgan</td>
<td>W-11-029</td>
<td>2003 OSH HB2718 22' HS RUNWAY SWEEPER $20,000.00</td>
<td></td>
<td></td>
<td>Total: $20,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $16,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $4,000</td>
</tr>
<tr>
<td>Kremmling</td>
<td>W-16-022</td>
<td>1992 OSH H-2518 B BLOWER/SNOW/RUNWAY SWEEPER $30,000.00</td>
<td></td>
<td></td>
<td>Total: $30,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $24,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $6,000</td>
</tr>
<tr>
<td>Nucla</td>
<td>W-32-023</td>
<td>1997 TRLK TK100HT-463 TRAILER/LOWBOY $5,000.00</td>
<td>W-32-050</td>
<td>2004 CAT MAGNA 3 TRAILER/CRACK SEALER $6,000.00</td>
<td>Total: $11,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $7,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $4,000</td>
</tr>
<tr>
<td>Montrose</td>
<td>W-11-031</td>
<td>2003 OSH HB2718 22' HS RUNWAY SWEEPER $20,000.00</td>
<td></td>
<td></td>
<td>Total: $20,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $16,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $4,000</td>
</tr>
<tr>
<td>Rifle</td>
<td>W-02-049</td>
<td>2006 CHEV K-3500 TRUCK/DUMP $8,000.00</td>
<td>W-21-035</td>
<td>1999 TKS MT5 TRACTOR/MUNICIPAL $5,000.00</td>
<td>Total: $13,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $8,900</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $4,100</td>
</tr>
<tr>
<td>Front Range</td>
<td>W-21-044</td>
<td>2005 TKS MT5 TRACTOR/MUNICIPAL $5,000.00</td>
<td>W-21-034</td>
<td>1999 TKS MT5 TRACTOR/MUNICIPAL $5,000.00</td>
<td>Total: $10,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $6,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $3,500</td>
</tr>
<tr>
<td>Alamosa</td>
<td>W-11-036</td>
<td>2003 OSH HB2718 22' HS RUNWAY SWEEPER $20,000.00</td>
<td>W-21-037</td>
<td>1999 TKS MT5 TRACTOR/MUNICIPAL $5,000.00</td>
<td>Total: $25,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $18,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $6,500</td>
</tr>
<tr>
<td>Meadow Lake</td>
<td>W-21-041</td>
<td>2005 TKS MT5 TRACTOR/MUNICIPAL $5,000.00</td>
<td>W-21-038</td>
<td>1999 TKS MT5 TRACTOR/MUNICIPAL $5,000.00</td>
<td>Total: $38,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $18,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $20,000</td>
</tr>
<tr>
<td>Leadville</td>
<td>W-21-044</td>
<td>2005 TKS MT5 TRACTOR/MUNICIPAL $5,000.00</td>
<td>W-20-003</td>
<td>1997 CAT 446B LOADER/BACKHOE $23,000.00</td>
<td>Total: $32,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $23,200</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $8,800</td>
</tr>
<tr>
<td>Colorado Springs</td>
<td>W-27-040</td>
<td>2002 FTL FL70 LIFT/AERIAL TRUCK $24,000.00</td>
<td>W-02-047</td>
<td>2006 CHEV K-3500 TRUCK/DUMP $8,000.00</td>
<td>Total: $5,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>State: $0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local: $5,000</td>
</tr>
</tbody>
</table>

Total: $272,000
Number of Pieces Sold: 22
Number of Airports: 12
State Share: $184,500
Local Share: $87,500
July 10, 2015

Christine Eldridge-AWOS Program Mgr.
Colorado Division of Aeronautics
5126 Front Range Pkwy
Watkins, CO 80137

Dear Ms. Eldridge,

Thank you very much for taking time to return our recent call about the status of the AWOS facility at KCPW. It's nice to learn that by late July or early August the KCPW site will be re-established at a nearby location after repair. Thankfully once again GA flyers crossing the lower San Juans in SW Colorado will have access to a potentially life-saving resource.

We all truly appreciate your on-going efforts within of the Division of Aeronautics to faithfully maintain the mountain-located AWOS sites throughout the State!

Sincerely,

Jim & Ilene J. Hammack
KPSO pilots
N89ZM, '89 F33A Bonanza

Cc: Kate Alfred, Airport Mgr. KPSO
Date August 12, 1015

TO: Colorado Aeronatical Board

From: David Ulane, Director

RE: Update 2015 Grants

Per the May 11, 2015 memorandum accepting the $11 million cash advance/loan offer from the Office of the State Controller, the Division is able to issue grants for five percent of the local match of FAA AIP grants only, up to $3,500,000. At the CAB meeting on April 17th, the Board approved 25 state grant requests for a total dollar amount of $3,343,448.

On July 8th, the Board approved a $10,201 increase for Yuma to match additional federal funds required to meet the project bid. To date, this is the only grant amendment approved, which brings our total 2015 grant obligations to $3,353,649.

Our plan this year is to not contract grants with airports until the FAA has issued their AIP grant to the airport. This allows us to obligate our funds when needed, confirm the exact amount the FAA is granting, and issue our grant in the appropriate amount at the onset, minimizing the need for future grant amendments. Of the 25 grants approved by the Board, we have currently contracted eleven for a total of $1,445,320:

- Aspen $ 166,789
- Eagle $ 474,008
- Ft. Collins $ 42,222
- Granby $ 16,666
- Greeley $ 16,666
- Gunnison $ 57,777
- Montrose $ 38,938
- Rocky Mtn $ 8,333
- Steamboat $ 8,333
- Alamosa $ 261,855
- Telluride $ 353,733

The FAA has not yet issued grants for the remaining 14 projects. We anticipate that as they are granted, there may be some changes in the original requested totals, based on project bids and FAA grant amounts. Planning staff is working closely with FAA and airport sponsors on these, and we will bring each change to the Board as needed, cognizant of the $3.5 million dollar state grant limit.
July 30, 2015

From:  William E. Payne, P.E.
To:    Colorado Division of Aeronautics

Colorado Surveillance Project Phase III
Progress Report #37

Re:    Period:  July 1, 2015 through July 30, 2015

This report describes the activities which have been performed in support of Phases II and III of the Colorado Surveillance Project. Activities below describe services performed for the period referenced above.

Services per Contract as follows:

**Phase II WAM – Contract Amendment No. 1**

Task D, Project Milestones:  As part of ongoing monitoring, the software upgrades to Phase II Tracker were installed the weeks of July 6 and 13, 2015. The system was shut down for a period of three days to adapt and test the new software modifications. Flight tests of the latest software changes should be done by the last week of July.

**Phase III Blended Airspace (Remote Airport Traffic Control) – Contract Amendment No. 2**

Task 2, Program Development:  The Blended Airspace Project has been moved from the Surveillance Broadcast Services (SBS) Program Office to NextGen from where the demonstration project will be administered. To ensure that the project continues forward uninterrupted the original Reimbursement Agreement must be amended to extend the project term past the current end date established by CDOT of December 2015 until June 2018. CDOT Procurement has created the amendment for FAA review and approval. The FAA NextGen Business Manager is reviewing the language with FAA legal and contracts and will reissue the amendment in the FAA format. This is necessary to avoid disturbing the original Reimbursement Agreement.
Meetings with the National Association of Air Traffic Controllers (NATCA) indicated the Union will provide line controllers from around the country to be involved in the evaluation process.

A meeting with the Deputy Associated Administrator for Airports and his staff was held to brief and discuss the proposal to add language in the upcoming FAA Reauthorization Bill to allow AIP funds to be used for a Blended Airspace aka remote tower solution at small and medium sized airports. They continue to be supportive of the concept although as FAA employees they are not allowed to support proposed legislation. However, they will be asked to review and comment on the language should it make it into the bill. Therefore the more they understand the concept the more likely they are to agree with change.

Additionally a meeting was held with the US Contract Tower Association of the AAAE to discuss the proposed idea of allowing AIP funding to be used to support a Blended Airspace solution should and airport desire to do so instead of a more typical AIP project. In essence AAAE recognizes that remote towers provide a more cost effective solution to constructing a traditional ATCT and could support such a proposal depending on the final form of the language.

Anticipated Next Steps:

1. The next step will be for the NextGen Program Office to select the key site for the demonstration project as well as a possible supplementary site from the list of Colorado airports provided based on input from the Division and other FAA lines of business. It is anticipated that the selection will be complete by the first or second week of August.

2. Following that, the next steps will be for the NextGen system engineering team to perform a site visit to evaluate the candidate airport to aid in making the final selection. The date of the site survey has not yet been finalized. We are waiting to determine when the next meeting at FAA Headquarters will be scheduled. Meetings were held with the NextGen team to discuss the Blended Airspace demonstration project as a dual use project to test both the Blended Airspace concept and a UAS ground based sense and avoid system. The duel use concept could offer a way to integrate manned and unmanned aircraft into the same airspace.

Task 3, Implementation: A series of program meetings with the NextGen Program Office were held the week of July 6, 2015 at FAA Headquarters to develop an outline path forward to implement the demonstration project at one or more Colorado Airports. The briefing for the FAA Western Service Area was developed to provide the Western Service Area lines of business, Air Traffic, Technical Operations, System Operations and Planning and Requirements with a high level overview of the project and the international status of remote towers. Subsequent to the briefing the Western Service Area was asked to provide input on the demonstration project concept. The major questions revolved around the location of the Blended Airspace operational facility and the controller workforce to be used, FAA or contract controllers.

Task 1.8, Develop a program unique to Colorado utilizing NextGen surveillance sources to allow telemetry and tracking of UAS/UAV and commercial space vehicles: The week of July 27th NASA Ames is sponsoring the UAS Traffic Management (UTM) conference. I will be attending the conference and meeting with the Ames Automated Airport Group to discuss compatibility with the Blended Airspace operational concept.
Services Not Tasked by Contract:

The CDOT Geohazard Group has received temporary N numbers for both CDOT UAS vehicles (ST-800 and QAV-500). The QAV-500 quad-copter is currently flying under the existing COA and the new ST-800 hexa-copter is under review via the recommitment of the existing COA. The Geohazard Group is operating under a waiver obtained by this office until the final N numbers are issued by FAA Aircraft Certification.

Completion of the registration process is vital to be able to continue flying the QAV-500 and to begin flying the ST-800. Unfortunately, the two processes are completely independent within the FAA and Aircraft Certification does not communicate with the UAS Integration Office. Therefore, we are coordinating between the two lines of business.

The CDOT UAS pilot in command has successfully completed all requirements under the current FAA rules governing public aircraft. Prior to completion of the required training, CDOT was flying under a waiver obtained by this office through the FAA UAS Integration Office.

Anticipated Next Steps:

1. A meeting will be scheduled with the Geohazard Group and other groups within CDOT to discuss modifying the existing COA to allow other groups to utilize the current COA in support of other CDOT activities.

2. Metro State is a partner in the Firefighting Center of Excellence located in Rifle and has expressed an interest in using the CDOT COA as part of Metro State’s effort with the Center of Excellence.
DATE: July 27, 2015

MEMORANDUM FOR: David Ulane,
Director
Aeronautics Division

SUBJECT: Released Audit Report
Review of the Web-based Information Management System (WIMS)

The attached audit report presents the results of our review of WIMS (Project number 15-013) reviewed and released by CDOT Audit Review Committee on July 24, 2015. This audit adds value by assisting management with reducing information system risk.

We conducted this audit pursuant to Section 43-1-106, C.R.S., which authorizes us to conduct internal audits on CDOT. This report presents our findings, conclusions, recommendations and the responses of CDOT Management. Our audit was completed at the request of CDOT Management.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact me at (303) 757-9687.

Barbara Gold, CPA CISA
Audit Division Director

Attachment

cc: Shailen Bhatt, CDOT Executive Director
Amy Ford, Director Communications
Kathy Young, Senior Assistant Attorney General
Web-Based Information Management System (WIMS)

The Audit Review Committee has released this report for public review.

Released Report

Report Date: May 8, 2015
Audit No: 15-013
EXECUTIVE SUMMARY

Purpose of Review and Objectives:

The purpose of this review was to assess the Web-Based Information Management System (WIMS) at the Division of Aeronautics. This audit was made at the request of the Aeronautics Division Director. Our objective was to assess the implementation of WIMS and the quality of the discretionary grants drawdowns.

Background:

The Division of Aeronautics began developing the WIMS in 2012 with the aim of providing better customer service while reducing staff time needed to administer grants. The intent of this system is to provide the Division of Aeronautics with a database to keep complete records on capital improvement planning, fuel tax collection and distribution, grant applications, administration, and project close out.

Conclusion:

Overall, WIMS was properly implemented. Generally, discretionary grant drawdown information contained in the system was valid and complete. However, we identified opportunities that would improve future implementation phases of WIMS, as well as the quality of the discretionary grant drawdown information. Specifically, we found:

- Implementation documentation was incomplete.
- User access accounts were not properly established.
- Supporting documentation was not standardized for payments (drawdowns) within the drawdown module of WIMS.
- Copies of the final signed contracts were not always uploaded into the system.
- Surplus sales were not always approved within the system.
- Fields and standard reports were not fully identified and utilized.

These conditions occurred because management was not completely knowledgeable of policies and procedures relating to both software implementation and information requirements. Consequently, functionality of WIMS was reduced and the WIMS system contained inaccurate information regarding discretionary grant drawdowns. We recommend that the Director of the Aeronautics Division ensure: 1) documentation of WIMS is completed by both the Division and the developer 2) administrative rights access is restricted and that the generic user information is properly updated 3) written policies and procedures for grant reimbursement are developed that would include a summary, as well as supporting documentation for the payment 4) signed copies of contracts are uploaded into WIMS 5) supporting documentation is contained in WIMS for surplus sales and 6) fields and standard reports are identified and utilized.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>II. Conclusion</td>
<td>1</td>
</tr>
<tr>
<td>III. Audit Results</td>
<td>2-6</td>
</tr>
<tr>
<td>WIMS Implementation</td>
<td>2</td>
</tr>
<tr>
<td>User Access</td>
<td>4</td>
</tr>
<tr>
<td>Drawdowns</td>
<td>5</td>
</tr>
<tr>
<td>Fields and Reports</td>
<td>6</td>
</tr>
<tr>
<td>IV. Management Actions</td>
<td>7</td>
</tr>
<tr>
<td>V. Recommendations</td>
<td>7</td>
</tr>
<tr>
<td>VI. Management Comments</td>
<td>7</td>
</tr>
<tr>
<td>VII. Evaluation of Management Comments</td>
<td>7</td>
</tr>
<tr>
<td>VIII. Appendices</td>
<td>8-15</td>
</tr>
<tr>
<td>Appendix A: Management Comments</td>
<td>8-9</td>
</tr>
<tr>
<td>Appendix B: Additional Information</td>
<td>10</td>
</tr>
<tr>
<td>Objective, Scope, Methodology and Criteria</td>
<td>10</td>
</tr>
<tr>
<td>Prior Audit Coverage</td>
<td>10</td>
</tr>
<tr>
<td>Appendix C: Policy CISP-8 - Access Control</td>
<td>11-13</td>
</tr>
<tr>
<td>Appendix D: Fields and Report</td>
<td>14-15</td>
</tr>
</tbody>
</table>
**Introduction**

The Division of Aeronautics (Division) and Aeronautical Board (Board) are responsible for: (1) promoting safe and accessible general and intrastate commercial aviation in Colorado and (2) ensuring that the State has an aviation system that can support the needs of its residents, visitors, and businesses [Section 43-10-101, C.R.S.]. The Division’s key duties include disbursing aviation fuel tax reimbursements, overseeing grants to airports, conducting airport pavement and safety inspections, and providing planning and technical advice to airports. The Board statutorily oversees Division operations. The Board and Division do not regulate the State’s airports or oversee the airline industry. Rather, the Federal Aviation Administration (FAA) is charged with these responsibilities. See Appendix B for additional information about this audit.

The Division does not receive any state general funds. All of its revenues (100 percent) derive from aviation fuel taxes which are deposited in the State Aviation Fund. Fuel taxes are collected on all aviation fuel. Currently, the Division consists of eight employees, including three planners, who support a system of 74 public-use airports in Colorado.

The Division contracted with an outside vendor for the development of a Web-based Information Management System (WIMS) in 2011. The WIMS is intended to increase Division efficiency by reducing staff time needed to administer grants and to improve its effectiveness through better customer service. When complete, WIMS will have three phases. Phase I, capital budget planning, airport revenue and expenditure tracking, has been completed; and the Division began using it in 2012. Phases II, revenue reconciliation and Phase III, SAP/WIMS integration, are expected to be completed in the near future. While all three phases have different functional purposes, they all require similar development and implementation processes.

The Division of Aeronautics began developing the WIMS in 2012, with the aim of providing better customer service while reducing staff time needed to administer grants. The intent of this system is to provide the Division of Aeronautics with a database to keep complete records on Capital Improvement Planning (CIP), fuel tax collection and distribution, grant applications, administration, and project close out.

**Conclusion:**

Overall, WIMS was properly implemented. Generally, discretionary grant drawdown information contained in the system was valid and complete. However, we identified opportunities that would improve future implementation phases of WIMS, as well as opportunities to improve the quality of the discretionary grant drawdown information. Specifically, we found:

- Implementation documentation was incomplete.
- User access accounts were not properly established.
- Supporting documentation was not standardized for payments (drawdowns) within the drawdown module of WIMS.
Copies of the final signed contracts were not always uploaded to the WIMS system.
Surplus sales were not always approved within the system.
Fields and standard reports were not fully identified and utilized.

These conditions occurred because management was not completely knowledgeable of policies and procedures relating to both software implementation and information requirements. Consequently, functionality of WIMS was reduced and the WIMS system contained inaccurate information regarding discretionary grant drawdowns. We recommend that the Director of the Aeronautics Division ensure: 1) documentation of WIMS is completed by both the Division and the developer 2) administrative rights access is restricted and that the generic user information is properly updated 3) written policies and procedures for grant reimbursement are developed that would include a summary, as well as supporting documentation for the payment 4) signed copies of contracts are uploaded into WIMS 5) supporting documentation is contained in WIMS for surplus sales and 6) field and standard reports are identified and utilized.

Audit Results

WIMS Implementation (Phase I)

Generally, the Phase I implementation of WIMS was properly conducted. However, we did identify opportunities for improvement with regard to documenting the implementation process. Specifically, we reviewed eight implementation areas and found five of the eight were not fully implemented by the Aeronautics Division. In addition, two of the seven implementation areas that required documentation by the developer were not completed. Table 1 shows the eight implementation areas along with the completion status of the documentation required by the Aeronautics Division. Table 2 shows the seven implementation areas along with the completion status of the documentation required by the developer.

Documentation of the implementation process is one of the requirements provided by the Information System Audit and Control Association (ISACA)\(^1\) guidelines. These guidelines require that each stage of the development and implementation process be documented. These guidelines also require the developer and the user identify specific user requirements of the system and that these requirements be documented and agreed-upon. Documenting the agreed-upon user requirements provides assurance that all requirements have been identified and provides accountability for the developer’s implementation of them.

\(^1\) The Information System Audit and Control Association (ISACA) have adopted information system standards, guidelines and procedures for auditing and control professional (Sections G21 Enterprise Resource Planning – System Review and section G29 Post-Implementation Review).
### Table 1
Status of Documentation by the Aeronautics Division
As of 11/18/2014

<table>
<thead>
<tr>
<th>#</th>
<th>Implementation Areas</th>
<th>Fully Documented</th>
<th>Division’s Approval Documented</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Major Project Deliverables</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Completion Dates</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Needs / Feasibility Study</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>Data Conversion</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Testing</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>6</td>
<td>Security</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>7</td>
<td>Go-Live Decision</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>Training</td>
<td>Yes</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source Data: CDOT Audit - Analysis of WIMS Data

### Table 2
Status of Documentation by the Developer
As of 11/18/2014

<table>
<thead>
<tr>
<th>#</th>
<th>Implementation Area Description</th>
<th>Phase was Complete</th>
<th>Phase Properly Documented</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clean Up</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Portal Clean Up and Tax Definition</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>Portal Page Completion</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>Supplemental Grant &amp; Sponsors</td>
<td>Yes</td>
<td>Partially</td>
</tr>
<tr>
<td>5</td>
<td>Tax Integration Definition</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>Training Development &amp; Delivery</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>7</td>
<td>User Acceptance Test Stabilization</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Source Data: CDOT Audit - Analysis of WIMS Data
Web-based Information Management System

By not properly documenting the approval of various phases or areas of the WIMS' implementation, management increases the risk that the WIMS system will not be efficiently and effectively implemented, and that the system will not meet the needs of the division in managing grant information. Specifically,

- Managing the contract for the WIMS' implementation to ensure the vendor complies with all aspects of the agreements (on time, on budget, functionally etc.).
- Ensuring that the developer understood the system requirements established by management in order to avoid implementation delays and or issues with the functionality.
- Ensuring that conversion of the data from the manual system (spreadsheets, hard copies, etc.) to the WIMS system and the results of the conversion were successfully performed.
- Ensuring that testing results of the WIMS Phase I implementation were satisfactory according to the initial requirements provided by management.
- Ensuring management actively participated in all the phases by reviewing and authorizing vendor's documentation after completing each phase of the project.
- Ensuring management authorized and documented the Go-Live decision (final step prior installing the system). This is essential to ensure that the final version of the implemented software is authorized by the management.

**User Access**

Overall, the user roles, log, and password requirements set up by the Division for its WIMS application ² were in compliance with the Colorado Information Security Policies. However, we found that user access was not properly established. Specifically, assignment of administration rights was not properly established and managed. For example, the Division is composed of eight full time employees all who had system administrator’s roles. The system administrator account provides unrestricted access to the assigned individual. Assigning system administrator access to all of the users in any system increases the risk for users to modify/override system configuration, as well as bypass controls within the system.

In addition, we found the use of a generic user established by the developer also had system administration rights. Access to systems is managed by giving users specific privileges related to their role and by assigning users with a unique user name and password. Generic users do not have a unique user name. For example, **user name: developer team**, as opposed to **user name: john smith**. Assigning user names that are not unique and/or generic increases the risk of improperly managing the users and/or tracking their activities.

---

² We obtained a list of all the active and inactive users as of August 20, 2014. We identified 182 users, of which 130 were active users and 152 were inactive users.
Colorado State policy CISP-8 requires that user accounts be properly established and safeguarded. See Appendix C for details on Policy CISP-8 related to user access.

By not properly establishing users’ access, there is an increased risk of unauthorized access to the WIMS system.

**Drawdowns (Discretionary Payments)**

Generally, information contained in the drawdown module of WIMS relating to discretionary grant drawdowns\(^3\) (payments) was complete, valid, properly approved and supported by documentation including written contracts. Furthermore, drawdown information\(^4\) was properly reflected in SAP. However, opportunities to improve the quality of this information exist. Specifically,

- Supporting documentation was not standardized for payments (drawdowns) within the drawdown module of WIMS.
- Copies of the final signed contracts were not always uploaded to the WIMS system.
- Surplus sales\(^5\) were not always approved within the system.

**Lack of Standardized Supporting Documentation:**

Drawdown information contained in WIMS was not standardized. Without standard documentation, the Division is at risk of duplicate payments, payments for unsupported or inadequately supported claims, payments for services not rendered, and payments resulting from fraud and abuse. In addition, standardizing the documentation would decrease the amount of review time and increase the overall efficiency of the process.

**Signed Contracts**

Signed contracts were not always uploaded into WIMS. Currently, the grant manual does not require the upload of a signed copy of the contract for each drawdown. Signed copies of the grant contracts, including notice to proceed dates, grant contract terms, and invoice reconciliations should be available within the WIMS system. By including signed copies of the contracts, management ensures that all supporting documentation for the drawdown is in one location which increases the efficiency of the review.

---

\(^3\) Drawdowns refer to the payments for goods and services associated with the grants awarded by the Division to airports. As goods are delivered and services are provided, airports request funds from their grant budgets to pay for these goods and services.

\(^4\) We judgmentally selected 35 drawdowns from 374 that were paid during 2013. These included ongoing and completed grants and grants for surplus, internship, and educational programs.

\(^5\) Surplus sales are not directly related to discretionary grant payments, but were assessed during our review since they are contained within the drawdown module of the WIMS system.
Surplus Sales

Surplus sales approvals were not always properly documented. During our testing, we noted that the approvals for the grants from the August 2013 DIA surplus sale were omitted from the drawdown module. Management advised this was the first sale in which they had used WIMS and were still in the process of developing procedures.

We noted that a process had been developed for proper approval documentation of surplus grant drawdowns by the time of the 2014 surplus sale. Without the approval history for drawdowns within WIMS, verification of proper approvals and adequate segregation of duties of payment authorizations is not available or verifiable.

Fields and Reports

Management could better analyze information contained in WIMS through the use of fields and increasing the available number of standardized reports. During our review, we found that not all fields and or reports were available which would improve analysis of grant information. For example, there were no reports showing the different levels of approval for a specific grant. Having this information would assist in determining if proper approval for the grant was made, as well as identify the person who made the approval. There was also no standardized report available that would show the number of final payments by airport and by year. Therefore management does not have the most complete information when making decisions relating to the discretionary grants. For additional suggestions on fields and reports see to Appendix D.

---

6 Fields are an expression of data within the system. Various fields can be combined based on users’ needs in order to generate multiple types of reports. Users should rely on these reports to support and understand their operations.
Management Actions

During the course of the audit, management began to take corrective action. Specifically, management began:

- Documenting the implementation of the WIMS system.
- Uploading signed final copies of contracts.
- Uploading supporting documentation for surplus sales.

Recommendations

We recommend that the Director of the Aeronautics Division ensure:

1. Documentation of WIMS is completed by both the Division and the developer.
2. Administrative rights access is restricted and that the generic user information is properly updated.
3. Written policies and procedures for grant reimbursement are developed that would include a summary, as well as supporting documentation for the payment.
4. Signed copies of contracts are uploaded into WIMS.
5. Supporting documentation is contained in WIMS for surplus sales.
6. Fields and standard reports are identified and utilized.

Management Comments

Management agreed with the findings and recommendations made in this report. Management also advised that all the recommendations have been implemented.

See Appendix A for management comments in their entirety.

Evaluation of Management Comments

The Division of Audit considers management’s comments responsive to the recommendations and corrective actions should resolve the issues identified in the report.
Appendix A – Management Comments

Management Comments

CAB 8-12-15
Agenda Item 13

April 22, 2015

TO: Barbara Gold, CPA CISA
Audit Division Director

FROM: Stanley J. Buck,
Division of Aeronautics, Interim Director

Subject: Management Response to Audit No: 15-013

Thank you for the opportunity to reply to the Audit Report on the Implementation of the Web-Based Information Management System (WIMS). I would like to begin by expressing my appreciation for the effort and cooperation of you and your staff. I am certain our WIMS program is better as a result of your review and recommendations. The following are the Division Management Response to your recommendations.

Recommendation 1 Agree Implemented: 30 November 2014

After meetings with the audit staff last fall, the division formulated a plan with the developer to collect implementation documentation for phase II. This documentation is being maintained by the developer in a Salesforce application called Vertigo.

Recommendation 2 Agree Implemented: 1 March 2015

The division has multiple “System Administrator” licenses because this is the level of functionality required to fully access WIMS. We have the ability to assign system administrator control to one person who then can modify the access for each of the other licenses. This primary control is assigned to the Senior Planner position.

Recommendation 3 Agree Implemented: 30 November 2014

The division implemented a requirement for a summary sheet if there are multiple invoices in a single drawdown. The Division Planners are trained to review and approve drawdown requests using a uniform process that outlines the acceptability of backup documentation. Each drawdown approval is reviewed and approved by the Program Manager for completeness and uniformity. These requirements are re-committed to airport sponsors each time their submittal is unacceptable. Rejection of a drawdown request automatically is recorded in the system.
Appendix A – Management Comments

Recommendation 4

Agree

Implemented: Immediately

The WIMS files identified in Recommendation 4 were a part of the transition period between the Division’s legacy record keeping prior to WIMS, and directly after implementation of WIMS. The grants identified were administered in both systems as a test of the program. The contracts not included in WIMS were on file in Division legacy files both electronically and in hard copy. The files identified were transferred to WIMS on the spot and the process for all current and future grants requires contract inclusion in WIMS at the time each contract is signed.

Recommendation 5

Agree

Implemented: Immediately

During the initial development of WIMS the primary consideration was to develop WIMS to manage Capital Improvement Plans and the submittal and administration of airport grants. When Denver International Airport notifies Division staff of their desire to sell surplus equipment, there is not sufficient time to go through the customary grant submittal process. When notified, Division staff has a short amount of time to set up the process. The Division asks the Board for funding and depending on the amount needed for each airport, purchase orders are created at the sale and are followed by a request for reimbursement to bring the equipment to an acceptable level of reliability. When the aforementioned POs from the surplus sale were created a process did not exist in WIMS. After identification of this funding by Audit, the drawdowns mentioned in the finding were annotated with comments describing the actual approval and a standard process was established to insure the documentation including approvals are recorded and consistent.

Recommendation 6

Agree

Implemented: 30 November 2014

After discussions with audit staff last fall, the Division increased its efforts to develop report generation capabilities both routine and exceptional. During this effort to expand these capabilities, the Division’s developer suggested we include a program called Conga that complements Salesforce. This program has greatly expanded our ability in reporting function. This coupled with the effort our staff has put into advances, we are confident in our ability to respond to exceptional reporting and have developed multiple recurring reports.

Note: Management Comments numbers 3, 4, & 5 will be included in the Division’s Program and Process (P&P) Manual. This manual will not be taken to the Board until the Division has a permanent Division Director. This manual will include any process changes identified by the upcoming performance audit.

Estimated completion and acceptance by Colorado Aeronautical Board is September 2015.

Sincerely,

Stanley J. Buch
Interim Director
Colorado Division of Aeronautics
Appendix B – Additional Information

Objective, Scope, Methodology and Criteria

The objective was to assess the Colorado Department of Transportation Aeronautics Division Web-based Information Management System.

We conducted this review from August 2014 through April 2015 in accordance with Generally Accepted Government Auditing Standards (GAGAS) except for a peer review not conducted within the three-year requirement. This peer review is expected to be conducted by the spring of 2016. These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions. We did not identify any instances of fraud or abuse. We discussed our observations and conclusions with management on March 31, 2015 and included their comments where appropriate.

Our review did not include the following areas of WIMS: 1) capital improvement planning, 2) grant application, 3) Aeronautics Board approval and 4) contract and fuel tax collection. In addition, we did not review internal controls related to grant administration, as well as budget and cash management processes.

In order to meet our objective, we conducted interviews with Aeronautics Division management, staff and the developer. We also conducted analysis and judgmentally selected records for review. We obtained a list of all the active and inactive users as of August 20, 2014. We identified 182 users of which 130 were active users and 52 were inactive users. We judgmentally selected 35 drawdowns from 374 that were paid during 2013. These included ongoing and completed grants and grants for surplus, internship, and educational programs.

We used the following standards, policies and procedures:

- Colorado State policy CISP-8, Sections 7.2.3.2 through 7.2.11.1.

Prior Audit Coverage

We have not previously conducted any audits or reviews regarding the Web-based Information Management System (WIMS).
Access Credentials – No Anonymous Access

7.2.3.2. Administrative Password

Account Passwords used for administration, paying special attention to any administrative passwords (such as “root”), is to be changed immediately on all systems when an IT staff member resigns, is transferred, or is terminated.

7.2.4. System Access Request

7.2.4.1. Employee File or Staff Record

Agencies are to develop procedures that ensure, prior to initial access, each Agency’s Human Resources (HR) representative has verified that an Agency Acceptable Use Policy (AUP) has been distributed to each user and a record of receipt and acknowledgement is maintained in the user’s employee file or staff record.

7.2.4.2. Record Retention

Agencies are to retain written records of IT System Access Requests, changes, terminations, and transfers for one year after the term of employment.

7.2.4.3. System Owner

All Agency systems are to have a “System Owner” that is responsible for approving and disapproving access requests for each given system. The System Owner grants access to requestors using a “least privilege” methodology.

7.2.4.4. Physical Security

All Agencies are to employ a similar Access Request procedure for granting access to Sensitive Areas. See Physical Security, P-CISP-010, for details.

7.2.5. Access Credentials

7.2.5.1. No Anonymous Access

Systems, which are not intended to be used anonymously, must require a unique username to access.

7.2.5.2. Unique Password

All systems must at a minimum require a password or other unique, private token to be validated prior to access.

7.2.5.3. System Administrators

System Administrators must have individual accounts or use utilities such as “sudo” or “Run As” to perform system administration tasks.
Password Requirements / Log-in Requirements

7.2.5.4. Service Accounts
Service accounts must be unique per application and not allow interactive access by providing a user shell.

7.2.5.5. Privileged Accounts
Privileged accounts are not to be used for non-administrative uses if possible. System administrators are to use their individual access accounts when making changes to systems to ensure accountability.

7.2.6. Password Requirements
7.2.6.1. Strong Passwords
Strong passwords are required to log in to critical state systems.

7.2.6.2. Strong passwords must:
7.2.6.3. Password Length
Be at least eight (8) characters in length.
7.2.6.4. Password Rotation
Be changed at least every 90 days.

7.2.6.5. Password Complexity
Require the use of three out of four of the following:
- Capital letters
- Lower case letters
- Numbers
- Special characters

7.2.7. Log-in Requirements
7.2.7.1. Logging Attempts
All systems must record successful and failed access attempts.

7.2.7.2. Unique IDs
Users are required to utilize their own individual, unique User IDs when logging in to the Agency networks and applications.

7.2.7.3. Technical controls
Where technically feasible, technical password controls must be implemented that enforce the guidelines in this document.
Appendix C – Policy CISP-8 - Access Control

Role Based / Least Privileged Access

<table>
<thead>
<tr>
<th>Title: ACCESS CONTROL</th>
<th>Document ID: P-CISP-008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version: 1.1</td>
<td>Creation Date: December 30, 2008</td>
</tr>
<tr>
<td></td>
<td>Revision Date: August 1, 2013</td>
</tr>
<tr>
<td></td>
<td>Superscedes Version: 1.0</td>
</tr>
<tr>
<td></td>
<td>Document Type: POLICY</td>
</tr>
</tbody>
</table>

7.2.8. Portable Computers

7.2.8.1. Portable Devices

Portable systems must be considered a stand-alone "enclave" and, therefore, have a local firewall deployed to restrict access to it.

7.2.8.2. Disk Encryption

Portable systems (laptops) must use full disk encryption with pre-boot authentication enabled (see Mobile Computing Policy, P-CISP-018).

7.2.9. Role Based / Least Privilege Access

7.2.9.1. Least Privileged

System owners must ensure that system roles are defined, establish varying levels of access, and are appropriate for the varying levels required for users to perform their job duties.

7.2.9.2. Minimum Access

Roles must only be granted based on the minimum functions required by users to perform their duties, including system or service accounts.

7.2.9.3. Approval

The data owner must approve role access requests.

7.2.9.4. Access Request Form

Roles must be clearly listed on a System Access Request Form.

7.2.10. Administrative Credentials and Sessions

7.2.10.1. Encryption

Connections to the systems to perform administrative functions must be encrypted (e.g., SSH, SSI, RDP).

7.2.10.2. Multiple Factor

Administrative credentials must use two-factor authentication or must adhere to password standards in this document if not using two-factor authentication. If using a password, it must be changed at least every 90 days.

7.2.11. Physical Access Controls

7.2.11.1. Physical Security

Specific physical access control guidance can be found in the Physical Security Policy, P-CISP-010.
Appendix D – Fields and Reports

Fields:

Section: Drawdown detail
- 12 fields exist within WIMS: Account, Drawdown Name, Grant Full Name, Description, Grant, Date and Status, SRM PO, SAP PO, SAP Service Entry Sheet (ML8IN) and SAP Park Invoice (MIR7)
- Four fields were not available for reporting: SRM PO, SAP PO, SAP Service Entry Sheet (ML8IN) and SAP Park Invoice (MIR7)

Section: State Claim Amount
- Four fields exist within WIMS: State Amount to be Paid, Claim Amount, Public Notes, and State Amount Remaining.
- All of these fields were available for reporting.

Section: Financials
- Nine fields: Total Element Amount, Grant Element Balance, Created by, Created Date, State, Local, Federal / Other, Last Modified by, and Last Modified Date.
- All of these fields were available for reporting.

Section: Drawdown History
- Three fields: Date, User, and Action.
- All of these fields were available for reporting.

Section: Approval History
- Seven fields: Action, Date, Status, Assigned to, Actual Approver, Comments, and Overall Status.
- None of these fields were available for reporting.

Section: Notes & Attachments
- Five fields: Action, Type, Title, Last Modified Date and Created by.
- None of these fields were available for reporting.

Reports

Module Capital Improvement Plan (CIP)
- 12 reports: CIP Summary by Airport, Project by Status, Carry Over Amount by Year, CIP Update History, Project by Airport and Year, Project History, Project History by Airport, Board CIP Summary, CIP 2015, CIP Greg, Grant Detail Report, and SOAR’s Comparison.
- All of these reports were available within WIMS.

Module Grant Application
- Six reports: Number of Applications by Year, Number of Applications Missing Information by Year, Number of Application Missing Information by Planner, Number of Application, Number of
Appendix D – Fields and Reports

Application by Type of Grant and Year, Status of all the Application by of Grant and Year.

- **Opportunity for improvement**: One of these reports could not be created, but data exists within WIMS.

**Module: Grant Evaluation**

- Two reports: Number of Applications Approved by Year and Number of Application Approved by Type and Year.
- **Opportunity for improvement**: None of these reports exist within WIMS, but the information is stored within WIMS.

**Module: Grant Contracting**

- Two reports exists within WIMS: Number of Contracts Executed by Airport / Year and Number of Notice to Proceed by Airport / Year.
- **Opportunity for improvement**: Two reports: Number of Applications Submitted to Procurement by Year and Status of all the Applications Submitted to Procurement by Year. These reports do not exist within WIMS, but the information is stored within WIMS. One report: Number of Notice to Proceed by Airport and Year. This report cannot be created due to WIMS’ limitations.

**Module: Drawdowns**

- Three reports exists within WIMS: Drawdown by Airport and Year, Drawdown Status by Airport and Year, and Drawdown Aging by Airport and Year.
- **Opportunity for improvement**: One report: Number of Final Payments by Airport and Year. This report cannot be created due to WIMS’ limitations, but the information is stored within WIMS.

**Module: Interface WIMS-SAP**

- Four reports: Number of PO by Year and Vendor (airport), Number of Payments by Year and Vendor (airport), Number of Amendments to PO by Year and Vendor (airport) and Number of Closed PO by Year and Vendor (airport).
- **Opportunity for improvement**: None of these reports exist within WIMS, but the information is stored within WIMS.
MEMORANDUM

TO: Colorado Aeronautic Board

FROM: Leo F. Milan, Jr., Senior Assistant Attorney General

RE: Federal Preemption & Commerce Clause/Seaplane Application

Although on-point case law is non-existent in Colorado and very thin generally, there happens to be a case on point discussing federal preemption and seaplanes, as well as a case discussing the commerce clause and seaplanes (notably, they are both a bit dated). The research revealed the focus of the court’s conversation relates to a city’s ability to regulate the land and water on which a plane or seaplane may land (especially notable in Gustafson).

Federal Preemption - Gustafson v. City of Lake Angelus, 76 F.3d 778 (6th Cir. 1996):

Plaintiff, Gustafson, brought suit against the City of Lake Angelus (“City), claiming the city ordinances1 prohibiting seaplane operation on Lake Angelus was preempted by federal laws. Id. at 781. The court of appeals stated the issue was “whether Congress, in passing the Federal Aviation Act, 49 U.S.C. §§ 40101-41901 intended to preempt the right of a local government to designate and regulate aircraft landing areas, specifically seaplane landings on a lake.” Id. at 782.

The court determined that “the United States’ sovereign regulation of the airspace over the United States and the regulation of aircraft in flight is distinguishable from the regulation of the designation of plane landing sites, which involve local control of land use (or, in the present case, water use). Id. at 783. The court’s analysis continued with a detailed discussion of the applicable federal regulations concluding that local laws prevailed in this instance. Id. at 785. Here, the court noted the regulations provided no designated landing location

---

1 The two city ordinances that were being contested were 66(E) & 26(J). Ordinance 66(E) stated, “Nuisances prohibited. Land may not be used for any of the following purposes, all of which are declared to be public nuisances: The mooring, docking, launching, storage, or use of any . . . aircraft powered by internal combustion engines...” Ordinance 25(J) stated, “The landing upon the lands, waters, or ice surfaces within the Village of Lake Angelus of any . . . seaplane . . .” was a public nuisance.
requirements and, further, the local ordinances were not in direct conflict with any federal law. 2 Id. at 785-86. In conclusion the court stated:

The federal government, rather than “preempting the field,” has not entered the field and exerts no control over the location of seaplane landing sites. If the federal government intended to preempt, we believe there would be a mass of regulations concerning seaplane landing sites, which simply does not exist. No federal statute or regulation address the action prohibited by the City of Lake Angelus ordinances or delineates the boundaries of local control in regard to seaplane landing sites.

Id. at 788. Here, the court held that federal preemption does not limit a city’s ability to designate landing sites under its “zoning authority.” Id. at 790.

**Commerce Clause – People v. Altman, 304 N.Y.S.2d 534 (D.Ct. 1969):**

Defendant, Altman, was charged with violating a city ordinance prohibiting taking off or landing seaplanes within the channel system of the city – except in the case of an emergency. Id. at 535. Although the bulk of the court’s discussion mirrors the Gustafson court’s discussion regarding application of federal preemption in such instances, the court here does briefly address the application of the Commerce Clause in such situations.

The court, in addressing the applicability of the Commerce Clause to the city’s ordinance, states “the states may exercise their police powers within matters of purely local concern by enacting legislation which has an incidental effect upon that commerce so long as the regulation is reasonable and necessary and does not unduly burden the flow of interstate commerce. Id. at 536 (citing Edwards v. People of the State of California, 314 U.S. 160 (1941), Huron Portland Cement Co. v. City of Detroit, 362 U.S. 440 (1960), Quaker Oats Co. v. City of New York, 295 N.Y. 527 (N.Y. 1946)). The court held that it was a proper exercise of police power to enforce legislation that prohibits air traffic upon its channels. Id.

**Conclusion**

Based on the available case law, Colorado Parks and Wildlife does have the right to preclude seaplane access in Colorado. It is Colorado Parks and Wildlife that will need convincing.

2 The district court had stated that federal preemption did exist and had cited to 14 C.F.R. §§ 91.115 (a) & 91.119, which detail safety standards of seaplane operation. The appellate court read these statutes in an opposite fashion and stated that because the statutes only regulated safety standards and therefore did not “illustrate an intent by Congress to pervasively regulate the field and to exert exclusive federal control over seaplane landing sites.” Id. at 785.