



MOUNTAIN WAVE

Quarterly publication of the Colorado Dept. of Transportation-Aeronautics Division

SUMMER 2001

COLORADO LEGISLATURE EXTENDS ANOTHER FUNDING SOURCE FOR AIRPORTS

One of the most exciting concepts to reach the airport community in the past several years was endorsed by the 2001 Colorado legislature when it authorized the use of State Infrastructure Bank (SIB) funds in a low-interest loan program to support aviation infrastructure projects.

In recent months, the need for an optional revenue source to fund significant infrastructure projects has been very apparent. Expanded financial resources on the national level have made it imperative to find a way of meeting local match to those airport sponsors fortunate enough to be tapped for Airport Improvement Project (AIP) grants. As the project funds expand, so does the need to find a way to facilitate the local commitment for matching funds.

As well as matching federal dollars, airports are frequently pressed to develop infrastructure that is neither eligible for federal funding or likely to receive state grants ... hangar construction, economic developmental projects and non-airside infrastructure.

An initial \$3M has been approved for immediate award in conjunction with the Colorado Discretionary Aviation Grant program and will probably first see service in meeting sponsor demand for matching federal funds for airport construction, development and expansion.

CDOT Aeronautics Director Travis Vallin's goal is to bring the loan program on-line as soon as possible and provide a mechanism by which airport sponsors may access the funds. Rules and regulations to facilitate the process are being drawn.

The responsibility for the SIB loan program will be facilitated by the Colorado Aeronautical Board with oversight management from the Colorado Transportation Commission.

For the convenience of the airport sponsor, annual interest for the 2001 loan cycle has been established at 3% with terms flexible up to ten years. No loan origination fee is planned for the present round of awards. Airports may look at the existing sales and excise tax reimbursement schedule as an option for routine repayment, in lieu of any additional commitment from local coffers if these revenues are sufficient.

The application period is planned to coincide with the Colorado Discretionary Aviation Grant (CDAG) program cycle, beginning in early July and closing in early September. Each loan application will be reviewed by the Division staff before it is presented to the Colorado Aeronautical Board at hearings held in conjunction with the CDAG grant hearings October 25, 26. The determination by the Aeronautical Board as a result of the hearing process will be forwarded to the Colorado Transportation Commission who will rule on the application and the CAB recommendation at its regular November public meeting. Funds should be available to the airport sponsor by December or early January.

A special thanks to the General Assembly in this landmark step forward. The State Infrastructure Bank program will serve as a supplement to the current grant program, will provide infrastructure funds for projects not eligible for CDAG awards or will assist an airport sponsor in meeting its commitment for large sums of money.

THE DIRECTOR'S CHATROOM

Travis Vallin, CDOT-Aeronautics Division Director

Walking down the hall of the aeronautics office the other day I couldn't help but notice a familiar face. It was none other than Mr. Jim Fels from the FAA Airports District Office and he had completely taken over the 10 foot table in our conference room and had paper piles scattered throughout the room. I kind of laughed at first seeing the whirlwind of papers and piles of joint capital improvement programs from airports, aerial photos, airport layout plans and master plans but started to think how lucky we are to have such a close relationship with the Airports District Office. I can not recall how many times I have been looking for Bob Lohne, Caroline Scott, T.K. Gwin or Chris Pomeroy only to find them over at the ADO office working on aviation issues facing Colorado. At one time I actually thought Bob set up a satellite office at the ADO. To the general public it would seem to be a logical connection, however, that is not always the case. The benefits derived from the close workings of the two governmental aviation agencies are not always clearly evident, so I thought I would share my thoughts on why this is beneficial for everyone.

When you look at how airports are funded, you will find three main sources of funding - federal, state and local funding. Because of programs like the FAA Airport Improvement Program and the State Aviation Discretionary Grant program, a large portion of airport funding (up to 95%) is provided by the federal and state government. With that much of the project funding potentially coming from the federal and state government, it is kind of nice to have everybody on the same page. One of the really neat things we have here in Colorado is a philosophy of a funding source that is the same color. What I mean from this is that the FAA, the Aeronautics Division and Colorado Aeronautical Board look at the federal and state funding sources as one funding pot. By viewing the funding in this way, we are able to allocate funding in a more efficient manner and extend our agencies' ability to meet the needs of our airports more fully.

A true-life example of this was a scheduled FAA project at Harriet Alexander Field, Salida, to resurface the runway in 2002. After looking at the runway condition, it was felt that CDOT funding could be used for a runway slurry seal to extend the life of the pavement and defer FAA funds until 2006, which would maximize FAA funding to other projects in Colorado. The Colorado Aeronautical Board has also funded a master plan update in conjunction with local matching funds, to be used to identify which FAA-eligible projects will need to be programmed to meet the needs of the airport over the next 20 years.

The joint Capital Improvement Program (CIP) is unique throughout the country because Colorado is one of only a few states that provide a "one-stop" approach to airport planning. On the CIP, you will see what is currently programmed for your airport within the FAA 5-Year Plan. This is your airport's opportunity to identify its intentions when applying to the state discretionary grant program. The CIP also allows the airport to identify projects being funded and completed solely with local resources, giving state and federal planners a picture of the local commitment.

Many times the airport community is not fully aware of future plans the airport. There are a number of ways to become aware of these projects. The local airport manager will most likely have a copy of the most recent CIP. Or you may wish to make a simple call to Bob Lohne or Caroline Scott at the Aeronautics Division at (303) 261-4418 or Jim Fels at the FAA Airport District Office (303) 342-1255. But probably the easiest way to see your airport's capital plans is to access the Aeronautics Division web site - (www.colorado-aeronautics.org). - where in July you can review the 2002 CIP updates for your local airport.

One thing is for sure, without the corporation and assistance of the FAA's Airport District Office in working jointly with the Aeronautics Division, the Colorado Aviation system would be no where close to where we are today.

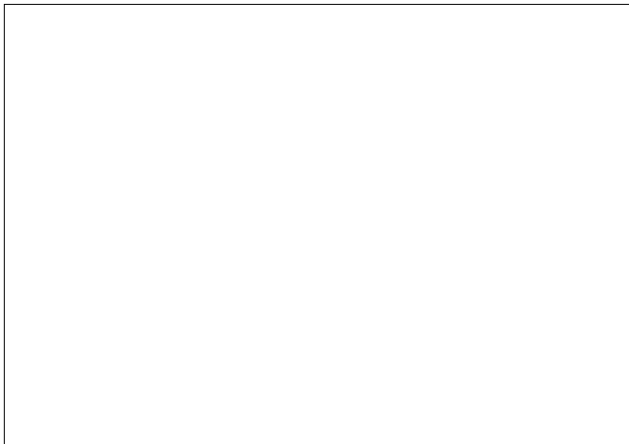
CONGRATULATIONS, HOLYOKE!!

In a recent edition of the *Mountain Wave*, we helped celebrate the opening of the newly-reconstructed Runway 14/32 at the **Holyoke Municipal Airport**. The October opening of the airport marked the conclusion of a project that had taken the attention and resources of the entire Eastern Plains community.

During the reconstruction, the runway was re-aligned by 30 degrees to meet wind requirements and extended to 5000 ft. to provide a facility for emergency and medical flight response.

In April, the spirit of community cooperation was honored at the FAA Northwest Mountain Region AIRPORTS CONFERENCE in Seattle as "an outstanding community achievement in planning and constructing the new airport".

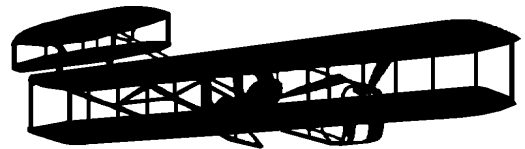
Accepting the honor from Regional Airports Division Manager, Lowell Johnson (left) on behalf of the City of Holyoke were mayor, Eldon McCormick and City Superintendent Mark Brown.



The entire community celebrated the opening of the newly reconstructed airport with a gala two-day event in mid-October 2000.



Visitors fill the apron at the Holyoke Municipal Airport opening.



1st Flight - 1903

COUNTDOWN TO KITTY HAWK

An evolution of ideas compelled Orville and Wilbur Wright's journey through innovation that marked the revolutionary discoveries of early manned flight. Working from the most rudimentary experimentation of others, the brothers patiently dealt with each untried demand – first with kites, then gliders and then mechanical propulsion.

Prior to experimentation with "wing-warping", the precursor of the aileron, direction-of-flight was handled by shifting the weight of the pilot's body. Wing warping accomplished the phenomenon of lateral direction with the use of a series of lines attached to the outer tips of the wings that were manipulated by the pilot to move the ends of the wings in opposite directions to create differing amounts of lift.

Based on ingenious experimentation in a make-shift wind tunnel, the Wrights were able to further their ability to control the aircraft with the introduction of a movable tail – and many successful glider flights occurred during 1901 and 1902 using this development.

In the spring of 1903, they built their first powered aircraft. The brothers conceived the propeller as rotary wings, producing horizontal thrust aerodynamically. By turning the airfoil section on its side and spinning it to create an air flow over the surface, the Wrights reasoned that a horizontal "lift" would be generated that would propel the aircraft forward. This concept was one of the most original and creative aspects of the 1903 Wright aeronautical work.

So in 2003 we will celebrate the very first "Giant Leap for Mankind" In this, the magnitude of the Wright Brother's innovation becomes more and more clear, as we journey through the centennial recollection of their genius.

Access the www.eaa.org website to learn more about plans to re-enact the history-making flight. Test your knowledge of the Kitty Hawk event by trying your skill at the "Wright Brothers Trivia Challenge" at www.firstflightcentennial.org. Discover what's going on at the Congressional site centennialofflight.gov which commemorates the nation's pride in Kitty Hawk

ECONOMIC IMPACT STUDY UPDATE PLANNED

The Colorado Aeronautical Board has underwritten the revision in 2001-2002 of the **ECONOMIC IMPACTS OF COLORADO AIRPORTS** originally completed in 1998.

In the new study, a careful look will be taken at the financial role airports and the aviation industry play in the life of our economy. The effect of the dollars spent at Colorado airports and for aviation services far out lasts their time on the air field...and are felt in the shops and restaurants, Walmarts and K-Marts, dude ranches and ski resorts of our very special state. One in every nine people in today's economy works in the transportation industry.

Senior Aviation Planner Bob Lohne will take the lead in developing the study, which looks for conclusions from the latest industry activities. Expect the study to be completed in early 2002.

It's a way to educate and inform. Airports and aviation sponsors have used the **ECONOMIC IMPACT OF COLORADO AIRPORTS** study to identify the role of our industry to their communities and citizens statewide, helping to bring a better understanding of the force of aviation in the economy.

What's that I hear - airplane noise? Sure sounds like money to me!

SUMMER'S A GREAT TIME TO VISIT YOUR FAVORITE AIRPORT

A visit translates into support of your community's lifeline to commerce, emergency services and the rest of the world.

See you there!

MOUNTAIN AWOS PROGRAM MOVES FORWARD

The initial six Automated Weather Observing System (AWOS) sites in the Governor's program to provide current mountain weather information for pilots are anticipated to be fully on-line in early July. Although currently broadcasting a "test" report, the fully certified start-up date was delayed from the original springtime schedule by the need for review and frequency clearance by the Federal Communications Commission (FCC). Realizing that the available pool of aviation communications frequencies is beginning to run decidedly *low*, the FCC remains alert in assuring that transmissions do not encroach on each other.

With these sites up and running, Aeronautics Division Mountain AWOS program manager, T.K. Gwin, is turning his attention to the siting and installation of four additional sites funded by the 2001 Legislative and supported by matching funds from the Colorado Aviation Fund. To date, the Legislature and the Aeronautics Board have pledged a total of \$1.1M to the AWOS program.

Joining the current sites at **Wolf Creek Pass, Monarch Pass, La Veta Pass, Vail Pass, Corona Pass** and **Monument Hill** sites will be AWOS facilities at **Cottonwood Pass, Saguache** and **Glenwood Springs**, which are programmed for service by 2002. An additional site at **Kremmling Airport** will be on-line by fall 2001.

Also recognizing the importance of navigation through the mountain passes, all revisions to sectional and WAC aeronautical charts for Colorado will identify their GPS coordinates.

A LONG, HOT SUMMER OF TRAVEL DELAYS

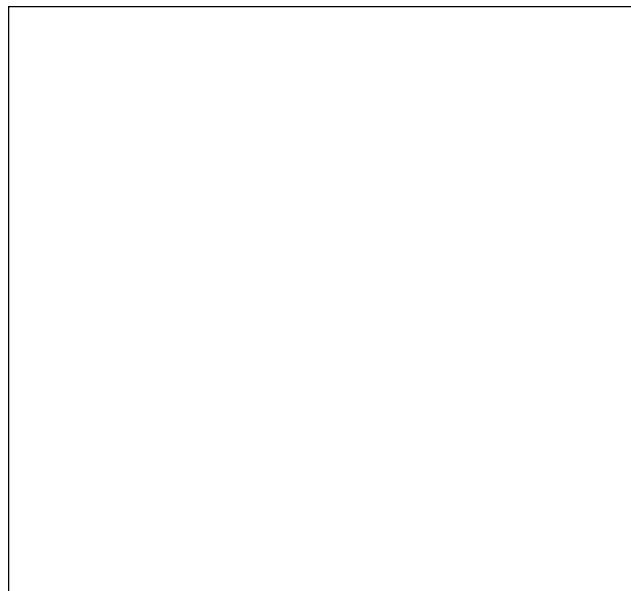
“It’s sort of like a family ... and it’s a dysfunctional family.” That’s the way Transportation secretary, Norman Minetta, in a recent interview on National Public Radio described the relationships between the nation’s airports, airlines and air traffic control.

As travelers and the aviation industry look forward to a frustrating and unpredictable summer, the Secretary says he spends a great deal of his time on the issue of capacity building - dealing with the gap between demand for transportation services and the capacity of the infrastructure to meet those demands.

Secretary Minetta looks at capacity building as the manner in which he addresses the issues of management, labor, air traffic control and the airlines - and the long-term need for more concrete. Concrete and the making of more runways and more airports is far from the immediate “fix” necessary to confront today’s airport delays. Collaborative decision-making between the airlines and air traffic control will create a smoother working relationship in the shortfall - hopefully, alleviating some of the horror stories anticipated during this long, hot summer.

But, with the full confidence of the current Republican administration, this lone-Democrat in the Bush Administration, looks forward to continued full funding of the major investment our nation will be required to place in the development of additional aviation facilities. Additional runway capacity at existing airports, rather than the revolutionary development of totally new facilities such as DIA, appears to be the more workable solution at the majority of airports.

Concerns for the environment, noise issues, compatible land use - coupled with enormous financial commitment, truly means the making of new runways provides little immediate relief. Consensus building and a willingness to work together within the industry is the Secretary’s hope for more friendly skies this summer. Let’s wish him well.



Congratulating Ron Dent (left), manager of the Durango-La Plata County Airport, on the success of the 2001 Annual Spring conference of the Colorado Airport Operators Association held in that southwestern Colorado city are Chris Pomeroy, CDOT-Aeronautics Division planner and Ron Price (right) of QED, Inc. who presented preliminary findings from the GPS Feasibility Study commissioned by the Colorado Aeronautical Board.

CAPITAL IMPROVEMENT PROGRAM **long-term planning for the future**

Each year, staffers from the CDOT-Aeronautics Division put their heads together with the FAA-Denver Airports District Office planners and engineers to define the needs at Colorado airports - then try to match these needs with the funding capabilities of the FAA-Airport Improvement Program (AIP) and the Colorado Discretionary Aviation Grant (CDAG) program.

The goal of the CIP process is to focus sponsors’ and planners’ attention on the short- and long-term concerns which have come from the annual responses of the airport. The whole process begins in February with the initial requests to sponsors for airport planning updates and concludes with the award of state funding in late October. During the interim, planners are able to identify available federal funds and incorporate these with local support and CDAG grant funds for the following year.

In the best scenarios, airports take a 5-year look down the road, so that these funds (local, state and federal) may be meshed with projected growth, developmental needs and maintenance requirements.

It’s the goal of the CIP process to anticipate long-term goals while responding to day-to-day on-airport needs.

LET'S TALK GROWTH ... the FAA's REPORT ON THE AVIATION INDUSTRY

The aviation industry will continue to grow – grow faster than the national population growth and GDP. That's the message from FAA Denver Airports District Office Manager, Alan Weichmann, to the membership of the Colorado Airport Operators Association at their recent meeting in Durango.

Trends begin to show increases in the number of aircraft being delivered or on order, with the largest increase appearing in the production of regional jet or "RJ"s for the airline industry - and larger and more sophisticated turbine and jet aircraft finding their way into private and fractional ownership fleets. Regional jets now service 157 US cities, following their introduction into the airline fleets. Since 1997, RJs in service with the regional and commuter airlines has risen from 89 to nearly 500 in 2000. And these numbers can be expected to double again within the next half decade, when delivery is made of the current 651 aircraft on order.

Air cargo, too, appears to be on the up-swing – it's increased 52% since 1990 to carry an average of 80M pounds per day in 1999.

Domestic enplanements are forecast to grow by 3.3% in 2001 – domestic passenger miles expected to be up by 4.2% between 2000 and 2012.

These are heady facts that lead to reflection about how safe our skies are, what improvements are being made in our airport system, the air traffic control arena, weather and navigation facilities. Growth, weather and labor problems contribute to the dissatisfaction quotient that is predicted to bring increased delays and greater frustration to the flying public.

COLORADO DISCRETIONARY AVIATION GRANT PROGRAM APPLICATION PERIOD OPENS

Once again, Colorado airports and aviation interests are invited to apply for State funds in excess of \$3M to support airport infrastructure, development and aviation programs.

This year's application period runs from early July through September 7th...grant hearings will be held at Greeley on October 25 and 26, in conjunction with the Fall Conference of the Colorado Airport Operators Association.

In addition to the hard copy mailed to each airport sponsor, this year's application may also be filed on line at the www.colorado-aeronautics.org website. A current **Capital Improvement Program (CIP)** must accompany each application and the project requested should appear on the updated 2002 CIP.

Airports wishing more information about the **Colorado Discretionary Aviation Grant** program or their **2002 Capital Improvement Program** should contact Caroline Scott at CDOT-Aeronautics at 303-261-4498.



HARRIET ALEXANDER FIELD
Salida
invites you to its
OPEN HOUSE
rescheduled for
Saturday, August 25, 2001

FORMER CAB MEMBER NEW OPERATOR IN DURANGO

With the goal of providing premium services to the flying community, former Colorado Aeronautical Board member, Doug Lashley of Durango, has announced the creation of *STARBASE DURANGO* at the **Durango-La Plata County Airport**.

After a lease agreement has been signed with the Airport, *STARBASE DURANGO* intends to begin hangar construction on a public facility that will provide fueling services, maintenance and aircraft cleaning - plus 24-hour credit card fuel self-service. *STARBASE DURANGO* hopes to be open for business by FALL 2001.

THE GRAND CONSPIRACY...

newest thriller set in the Rocky Mountains near Lake Granby couples adventure and excitement with a love of country and Colorado.

Don't be surprised if the author, William Penn, doesn't resemble former CAB member and AOPA Central Region Rep., Dr. William "Bill" Hamilton and his charming and clever wife, Penny.

A good read available at www.amazon.com or www.bn.com.

MOUNTAIN WAVE is a quarterly publication of the Colorado Department of Transportation Aeronautics Division.

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Or call us at: 303-261-4418

Visit our website at:
www.colorado-aeronautics.org

AERONAUTICAL BOARD LOOKS AT APPROACH UPDATES

The multi-year global positioning system (GPS) feasibility study, commissioned by the Colorado Aeronautical Board to analyze potential RNAV approaches to statewide airports, looks likely for completion in the near future. Hopes from the study attempt to show the number of airports that can support a satellite based approach and the *costs vs benefits* involved in making all this happen.

WAAS, or the Wide Area Augmentation System, does not appear to be coming on line as quickly as had earlier been hoped. And the next best guess for WAAS implementation appears to be 2004 or 2005. Local Area Augmentation System (LAAS) now promises to advance more quickly and be on line sooner than WAAS. LNAV/VNAV offering both lateral and vertical path identification is available at the present time and can be implemented where airport facilities allow. These procedures will call for facility support, such as runway lighting and safety area considerations.

But, don't worry - you'll continue to see and hear "VOR", "DME" "ILS" in the pilot vocabulary for some time to come.

Based on the airports identified in the recent State Aviation System Plan as "major" or "intermediate", the study has analyzed 38 airports - 33 of which can achieve better than current minimums, while terrain constraints limit the expectation of the additional 5 airports to existing approaches.

Whether it's LAAS or WAAS - RNAV, RNAV/LNAV or LNAV that is the language being spoken - the Aeronautical Board's study hopes to identify the controlling obstacles, required safety area and lighting needs and develop a likely cost to implement a given approach at each airport in the study.

The study will form the basis for funding decisions that are likely to be called for from the CAB as the satellite-based systems come closer to reality.

colorado waste tire grant program - a success for airports

Colorado airports have whole-heartedly gotten on board the Colorado Waste Tire Grant Program offered by the Colorado Department of Local Affairs and underwritten by the CDOT-Aeronautics Division.

Funded by the recycling fee each driver pays when he replaces old tires, the program offers a 75% reimbursement on purchase of crack filling materials which incorporate "crumb rubber" - ground up waste tires that would otherwise find their way into land fills or blight the horizon with mountains of debris.

The program is administered by the CDOT-Aeronautics Division as a service to the airports and has been totally enrolled during the first year of its operations. Participating airports can access the State's very attractive price agreement cost and be billed for the remaining 25% of the costs at the time of delivery to their airport. Reimbursement from the Waste Tire Grant Program is processed by the Division.

The program continues in state fiscal year 2002, beginning July 1st, with an additional \$50,000.00 program funding commitment. Interested airports can learn more about the program from CDOT-Aeronautics Division at 303-261-4418.

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**State Infrastructure Bank
offers low-interest loans
to airports**

**New AWOS sites planned
for 2002 in high country**

Holyoke Airport honored