FLIGHT LINES AVIATION AGENCY-REGION 9 FEDERAL Library Federal Aviation Agency Alaskan Region 230 STL VELO EID VOT DAY IND 230 511 V210 E10 V97 EVG LUE 230 STL VƏJO EID VƏ7 CVG VG 051 SERVICES 230 STL V210 EID V97 CVG 5th Ragion LONK RECEIVED CVG 05 FEB 18,1960 DAY IND STL V210 E103 WAS CAROUN 230 DAY IND 0527 SHB 230 STL V210 EID V97 CVG 218 130 ANCHORN DAY 0527 DAY IND 43 1ND 230 STL V210 EID V97 CVG

ACCURATE, LEGIBLE FLIGHT PROGRESS STRIPS ARE AUTOMATICALLY PRINTED OUT

AT A RATE OF UP TO 3.000 PER HOUR UNDER CONTROL OF THE IBM RAMAC 653

COMPUTER AT FAA'S INDIANAPOLIS AIR ROUTE TRAFFIC CONTROL CENTER.

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ON THE COVER

IN

AIR TRAFFIC CONTROL

. DIVISION REPORTERS .

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FROM OUR REGIONAL OFFICE

A frequent phrase in construction circles is a "change order", which is used to authorize work not originally included in a contract for building a house, road, office, garage or, last but not least, an airport.

During the four to six months construction time for a house, for instance, the prospective owner (or his wife) might change the color of the walls in the living room, color of the tile in the kitchen, or type and style of wall paper, or even worse, the arrangement of the rooms. This is food for the cartoonists and we chuckle at a representation of a bricklayer and a housewife in heated discussion over "just exactly" where the fireplace should be. Believe it or not, such things happen so frequently that builders have been forced to protect themselves in "the fine print" with phrases that protect them against the "changing mind".

You might think that the guest editor this month is building a case against any changes being made. Research is
directed toward doing or having something better, which
usually means a change of some degree. Changes that are
brought about by adequate study result in useful improvements. Surveys, calculations, drawings and specifications that
are prepared as part of a contract for work often represent
many man hours of effort and the resulting contract for construction of a runway or other item is actually an order for a
change and results in a safer, more useful facility to the public.

One of the challenges that all of us face is how to adjust to this changing world. Those of us close to aviation quickly see the impact of changes, and accept changes as a part of our way of life. Our problem is to be sure that such changes that we are responsible for, or contribute to, are really ones for progress and benefit. We are all now close witnesses to an organizational change, designed to give better service to all aviation. Our job is similar to a big construction contract like building a dam. The end result is a huge thing with a better capacity to serve. Our job, then, is to make the "big" change so we can contribute to mankind in a more significant way.

May we thus accept changes with a smile and willingness to assist in getting a better job done. The old cliche about "may all your changes be little ones" could possibly lead us into the Dark Ages again when progress was very slow. I prefer today, when big changes are being made, and all humanity benefits from the effort,

By the way, don't some of you know of a few changes we could make on some airport somewhere?

CLYDE W. PACE, JR., Chief, Airports Division

AUTOMATION IN TRAFFIC CONTROL

BY REED A. DILLON, ASSISTANT CHIEF, AUTOMATION SUPERVISORY AIR TRAFFIC CONTROL SPECIALIST CENTER

Indianapolis, the pioneer air traffic control center in the computer field, now has in operation the third electronic computer in as many years. The latest system consists of two medium size computers tied together, one to receive and transmit flight plan data, and one to process the flight data. In addition there is the RAMAC disk storage unit in which is stored geographical information and flight plan data.

The new computer system is called the "on-line" system, which means that it is connected directly with computers in three adjacent centers — Washington, Pittsburgh, and Cleveland. These centers are in turn connected with New York and Boston Centers. Via means of the on-line system the computers are capable of communication with each other automatically. This is communication accomplished with punched paper tapes and teletypewriter circuits.

Computers are used in air traffic control to receive flight plans, analyze the data contained in the flight plan and process the data, computing all estimates and printing the necessary flight progress strips. With each of the three computers that have been used in the Indianapolis Center, the operation has become more sophisticated.

The primary use of computers in the Indianapolis Center in the past has been fast and accurate preparation of flight progress strips. In this application the computer excells. It has the ability to execute 36,000 instructions per minute, requiring less than ten seconds to process the average flight plan. This, combined with absolute accuracy, insures that the controller will be provided with flight progress strips that are machine printed, easily readable, and accurate. Use of the computer system is now being expanded at the Indianapolis Center to perform other functions which are of value to the controller.

The computer will also store flight plan information on hundreds of flights and hold such in-

formation for future processing, coordination and / or updating. As an example, flight plans for flights that are proposed to depart an airport within the Indianapolis control area are held within the computer's memory until thirty minutes prior to the proposed time of departure. At that time the computer will call up the flight plan from memory and print the flight progress strips necessary for coordinating the departure of this flight. After departure, the actual departure time is given the computer and the remaining strips will be prepared.

If the airport from which a flight is proposed to depart is near enough to another center's area that coordination is necessary with that adjacent center prior to departure, the computer will automatically make the decision and send the flight plan to the appropriate adjacent center for coordination.

Flight plans on aircraft that enter the Indianapolis area from an adjacent area are processed



Air Traffic Controllers using flight progress strips to monitor flight routes for unsafe crossings and direct pilots accordingly.



Glenn C. Lenzer, Supervisory Air Traffic Controller Specialist Center, Deputy Chief, examining punch card, from which Flight Progress Strips are automatically printed by the IBM Strip Printer Machine shown here. Storage Drum seen at right in the background.



IBM 776 paper tape reader-punch units especially designed to provide automatic, multiple direct connections between teletype lines and the Center's new standard IBM data processing system. Messages are taken directly from teletype lines, edited and checked, and fed to the computer for processing.

immediately upon receipt, and the flight progress strips are printed and distributed to the appropriate sectors via means of conveyor belts. The computed data is then stored for coordination and/or updating. The information that is to be passed to an adjacent center for those flights that will exit the Indianapolis area is automatically taken from storage and transmitted to the appropriate adjacent center thirty minutes prior to the time the flight is estimated to exit the Indianapolis area.

With the basic flight plan stored away in the computer's memory, it is possible to modify the original flight plan. Altitude, change of route, estimated ground speed, and estimated time of arrival over a particular fix are some of the items that may be altered on the original flight plan. This makes it possible to pass accurate and up to date estimates to the adjacent centers by means of the computer when a flight leaves the area.

Once the flight plan is stored in memory, it remains there until one hour after the last action necessary has been taken. At that time it is deleted from memory within the computer and no further reference to that flight may be made. An alternate method of terminating the computer's knowledge of a particular

flight plan is by entering a cancellation message. Upon receipt of this type of message, the computer will advise the proper adjacent center, when necessary, and then delete all reference to the flight plan within the computer.

Since it would be extremely difficult and time consuming to ascertain which flight plans were being held in storage, once each hour the computer prints out a list of the flights that require further action. This list is prepared to provide an efficient transition back to a manual system of operation in the event of a possible power failure or machine failure. It is sequenced by time and contains the flight identification number, time action is to be taken, and the type of action required.

A high speed printer connected to the computer prints the flight progress strips at the rate of 50 strips per minute. These machine prepared strips offer several advantages over manual or hand written strips. All of the strips produced contain the entire route of flight. This can be as much as 5 lines or 125

(Continued on page 10)



Left to right: John F. Wubbolding, Center Chief Joseph W. Barr, IBM Representative; and Robert Williams, Washington Liaison.



One of our girls has made her usual long range safari. Lorene Neptune went to Florida to get warm. She should know betterit was warmer in Kansas City all the time she was gone. VVV

Edythe Nuding made a pleasant short trip to San Diego. She DID keep warm. It just goes to show you-California has always been warmer.

Everyone seems to have fared well over the Holidays. Now we

are ready for whatever comes

our way.

AIR CARRIER SAFETY DIVISION

Our other ready passport carrier is Wm. J. Weis, Jr., the electronics specialist who has just completed a similar type trip as Sid Denfip's. He visited Portugal, Spain, France, Italy, Switzerland, Greece and Egypt.

Both stated they were too busy to enjoy the status of tourists.

We have acquired a much needed "Girl Friday"—Mrs. Lila Miller has joined our ranks to speed up the work. Welcome aboard, Lila,

TIPPETS NAMED DIRECTOR OF FAA BUREAU OF **FACILITIES**

Joseph H. Tippets, a 22 year veteran in civil aviation, has been named Director of FAA's Bureau of Facilities and Materiel, it was announced recently by E. R. Quesada, Administrator, Federal Aviation Agency. Mr. Tippets has been serving as deputy director of the Bureau.

The new director began his government career with the old Bureau of Air Commerce in 1937 and held progressively more important posts in the former Civil Aeronautics Administration. From 1956 he served as Director of the Office of Air Navigation Facilities in the former CAA. When the CAA was absorbed by the Federal Aviation Agency, Mr. Tippets was given the task of organizing the Bureau of Facilities, which was recently enlarged into the existing Bureau of Facilities and Materiel.

As a major segment of the Federal Aviation Agency, the Bureau of Facilities and Materiel is responsible for the engineering, construction and maintenance of the nation's air navigation and air traffic control systems. Two other prime responsibilities of the Bureau are the management of the Federal Aid to Airports program and the construction of Dulles International Airport. In addition, the Bureau operates a large logistics. materials and overhaul depot at Oklahoma City to support the establishment and maintenance of Federal airways.

"Have Passport Will Travel"

now applies to two members of

our group. Sid Denfip, Chief Air

Carrier Maintenance, was the

first to help our region carry the

maintenance responsibility of

TWA to Europe. In November he

participated in the TWA proving

and training flights on the Boe-

ing 707, before the airplane en-

tered scheduled service on the

routes of TWA. He visited Iceland, United Kingdom, France,

Germany and Italy.

To meet a major goal of the FAA, that of modernizing air-

(Continued to page 23)



FAA OPENS BIDS FOR CONSTRUCTION OF NEW AIR ROUTE TRAFFIC CONTROL CENTER AT **OLATHE KANSAS**

The Sharp Bros. Contracting Company of 1014 E. 19th Street, Kansas City, Missouri, is the apparent low bidder among 20 bids submitted to the Federal Aviation Agency for the construction of an FAA Air Route Traffic Control Center at Olathe, Kansas, The apparent low bid by Sharp Bros. Company was \$1,462,575.

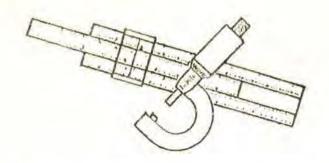
Bids were opened at the FAA Regional Office in Kansas City January 7, 1960. Announcement of the award is expected in the next 15 days.

The construction contract for the FAA Air Route Traffic Control Center at Olathe calls for a two-story type 3 Main Center Building of approximately 50,000 square feet, including two additional buildings which will house administrative offices.

The new Air Route Traffic Control Center, according to Leonard W. Jurden, Regional Manager of the FAA, will replace the present Center now located at Kansas City Municipal Airport and will control air traffic in portions of a 5-state area, which includes Kansas, Nebraska, Iowa, Missouri and Oklahoma.

Location of the Center is on a 91/2 acre plot near the intersection of U. S. Highway #50 and K. 150.

The contract calls for completion of the construction in 300 days. According to FAA officials, it will take approximately nine months to install the more than \$2,000,000 in electronic equipment in the new Center.



AIRCRAFT ENGINEERING

We Issue Production Certificates

Last month we explained how a Type Certificate is issued. Now the manufacturer has authority to build as many airplanes as he pleases just like the approved prototype, but the next question is "Can he do it?" Does he have what it takes in his manufacturing plant to make his airplanes come off the assembly line like peas in a pod?

Usually the manufacturer wants a Production Certificate, which is equivalent to Uncle Sam saying, "I know that you are equipped to make exact duplicates, and I trust you." Although this puts more responsibility on the manufacturer, it saves time for him because many of the detailed inspections by the FAA will be eliminated. First, of course, Uncle Sam must be assured that the manufacturer is worthy of this trust, and here is where our Manufacturing Branch comes in.

Manufacturing Inspectors work through District Offices which are located near all the major airplane and engine manufacturers in the Region. It is their ticklish duty to go into a manufacturer's plant and inspect everything that has a bearing on production. When the Manufacturing Inspector is satisfied that the facilities, methods and personnel are capable of producing airplanes in quantity that will be exactly as good as the approved original model, he recommends that a Production Certificate be granted to the manufacturer.

The Production Certificate does not relieve the Manufacturing Inspector of his duty to see that a manufacturer lives up to his responsibility. Also, since nothing remains status quo for very long in the fast moving field of aviation, changes of type certificated engines and airplanes are the rule rather than the exception. Advanced knowledge and service experience call for changes to improve the original design, and it is the Manufacturing Inspector's duty to decide whether the changes are minor and will not affect the original approval, or whether engineering studies and tests should be made and a new type certificate required. The manufacturer, naturally interested in production costs, leans toward the "minor" interpretation in borderline cases, so the Manufacturing Inspector must really know his stuff and be able to present some pretty convincing arguments when he disagrees. In actual practice there is a very good relationship between the Manufacturers in this Region and our Manufacturing Inspectors, for which the Regional Office is profoundly grateful.

The long arm of the FAA reaches even farther than the supervision of production at the manufacturers' plants. Certain parts which cannot be completely inspected at the engine or airplane manufacturers' plants are purchased from subsidiary manufacturers. To assure that no unairworthy item becomes a part of an FAA type certificated article, these parts are inspected by Manufacturing Inspectors at the subsidiary manufacturer's plant.

The continued surveillance by the Manufacturing Branch and its inspectors is one of the most important functions of our Division, and it is an integrated function. In the Aircraft Engineering Division no Branch is an island. Correlation and coordination are two big words with which we are very familiar. It takes all of us to lay the groundwork for safety in flight which begins with design and manufacture.

WELCOME

The Division is pleased to welcome two new employees, Harvey Van Wyen and Albert C. Ross.

Mr. Van Wyen has been selected as a Flight Test Engineer for the Flight Test Branch. He comes to us from the Riddle Airlines in Miami, Florida, where he was employed as Engineering Superintendent.

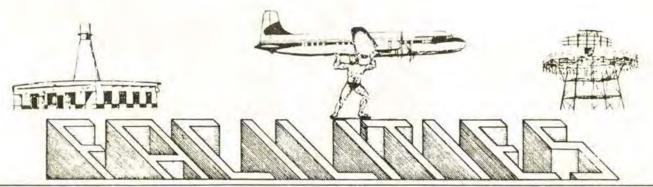
Mr. Ross has been selected as a Manufacturing Inspector and is stationed in our AEDO #42, Indianapolis, Indiana. He was formerly employed as Inspection Staff Assistant at Jonco Aircraft Corporation, Shawnee, Okla.

FAA is setting up at its NAFEC a 600 - mph - capacity wind tunnel acquired from the Navy. Tunnel will be used initially for tests of in-flight fire protection equipment.

MID-WEST CONTRACTOR IS SUCESSFUL BIDDER FOR CONSTRUCTION WORK AT FAA'S DULLES INTERNA-TIONAL AIRPORT

A Sioux City, Iowa, firm, The Western Contracting Corporation is the apparent low bidder among seven bids submitted to the FAA for the construction of utility systems and a large jet parking apron at Dulles International Airport.

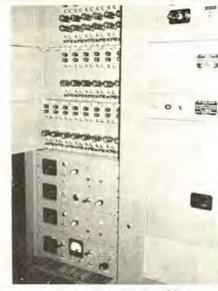
The low bid of \$10,468,000 calls for four miles of taxiways, aircraft fueling facilities, a water system, storm drainage, a natural gas system, a power and communications system as well as paving and sodding of certain areas.



FORT DODGE FLIGHT ASSISTANCE SERVICE COMMISSIONED

The Fort Dodge, Iowa, Flight Assistance Service was commissioned on November 16, 1959. This is the first of a new type facility in Region 3. This is known as an FAS Class II. This Flight Assistance Service is controlled by the Mason City, Iowa, ATCS over a telephone line. This facility contains the same complement of transmitting and receiving frequencies normally utilized at an ATCS facility and is remotely controlled, utilizing 20 channel tone control equipment.

This equipment is installed on the right hand side of the A/G Console and is an independent operating position from the Mason City ATCS. Also installed is a fast line service between Fort Dodge and Mason City that may be utilized by pilots for filing of flight plans. The commissioning of this facility was delayed because of the slow procurement of the new type equipment utilized. Now that this equipment has become available, additional Flight Assistance Service facilities will



Technicians will recognize this as a Flight Assistance Control rack, providing communications service to Fort Dodge, lowa.

be commissioned throughout the Region.

Mr. Clarence W. Hagen, SEIT, was the project supervisor from the Installation Engineering Section responsible for the installation and commissioning of this equipment.

ATFO #22—Farmington, Missouri. Farmington is seventy miles south of St. Louis in the foothills of the beautiful Missouri Ozarks—not a large sector ATCS, VOR/DME/TACAN, and one RCAG — another VORTAC scheduled for next year—1960) but one with plenty of out-of-door activities to occupy "spare" time.

The ATCS is located on the Farmington Airport (not a municipal airport but a privately owned commercial field). A new municipal airport is in the planning stages with the city approving a bond issue recently by a large margin (85.6%).

The VOR/DME/TACAN is located twelve miles southeast of the airport and a little more than 300 feet higher in elevation than the field. VOR and DME coverage is very good with no obstructions or higher elevations east, south and west and only slightly higher ground to the north.

The RCAG is located on Taum Sauk Mountain some thirty miles southwest of Farmington near the towns of Ironton and Arcadia. Taum Sauk Mountain is listed as the highest elevation in the State of Missouri, with 1772 feet msl



"Through these doors pass . . . "
answers to pilots' questions.



Luther Vale, Journeyman Communication Specialist, at the console; observed by C. L. Minker, Chief ATCS.

at the high point. The RCAG is about 1/4 mile from the high point and 13 feet lower in elevation. With the antennas on fifty foot towers, coverage is unobstructed in all directions.

The area in the vicinity of the RCAG is some of the most mountainous in the State of Missouri, with deep valleys, clear Ozark mountain streams (some purported to have fish in them too), and extensive stands of oak and pine forests. Wild turkeys are seen in the vicinity of the RCAG by FAA personnel frequently. Wildcats are often reported in the more remote sections and about a year ago a large black bear was killed about 25 miles from the RCAG.

A new VORTAC is scheduled for Richwoods, Missouri, in 1960, which will extend this sector about 45 miles to the northwest of Farmington.



Farmington, Mo., peripheral site associated with FAA communications in that area.



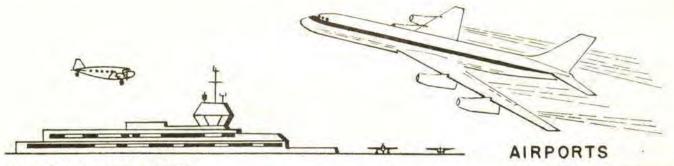
Human Relations Training course. Detroit area persons completing the course are: Front row—B. H. Lewis, Gweneth L. Nolan, John A. Robinson, William C. Mattern and Robert E. Seymour. Back row—Robert G. Juenemann, Daniel M. Vucurevich, Jane M. Wisler, Jackson H. Beyer, William H. Clark, Jr., and Walter A. Syrylo.



SUCCESSFUL SCRIBBLERS. Detroit personnel completing the Writing Improvement course are: 1st row—Diane J. Horton and Denise Soli; 2nd row—Janet A. Godfrey, Anthony M. Frank, John L. Blake and B. H. Lewis; 3rd row—Herbert M. Morgan, Julius H. Okrzesik, Glenn J. Bernard, Joseph McDermott, William H. Clark, Jr., and George G. Eisenhart; 4th row—Lauren M. Davis, Myron C. Gates, Sidney I. Rose, Jr., Daniel M. Vucurevich and Robert F. Koester. Also Bill Giddings took the course but missed the photo.



Right—Al Schuchmann, Electronic Mechanic, and Walt Glotzbach, Supervisory Electronic Specialist, checking communications equipment at Burlington, lowa, ATCS.



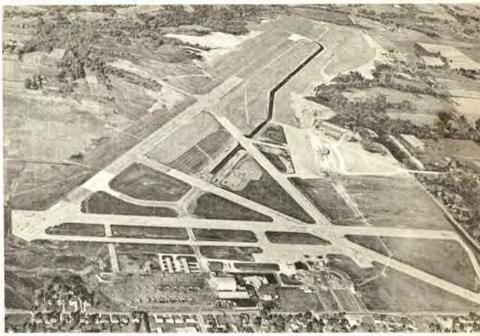
AIRPORTRAIT OF MONTH-

The photograph shows one of our more popular and active airports in Region III. Approaching from the East at 1500 to 2000 altitude above the ground, you see a large hangar in the immediate foreground. Several buildings surround the hangar and a large apron with 15 or 20 sleek aircraft are parked thereon in military precision. This suggests something of the activity and many purposes that this airport serves.

Circling the field (to the right in the photograph) you will see a small black-roofed hangar, then what looks like a small control tower on top of a flat-roofed building. On the field side of this tower is a concrete apron with two black spots showing evidence of considerable use of two gate positions by aircraft. You are actually viewing one of the major problems that this airport has faced and met successfully.

This area contained the airline terminal, the fixed base operator, the weather bureau the airport management office, a maintenance garage, and a public parking lot. All these activities were scrambled into a few acres of ground with no way for orderly growth.

By this time your aircraft (unless it's a whirlybird) will have taken you to where you will see the solution to the problem. If you haven't guessed where you are by now, this will settle the question. In the right center of the picture (surrounded by a white triangular road pattern) is the "Pride of Peoria", Illinois. Here you see a most attractive new terminal building, tower on top with plenty of room for expansion and additional equipment in the floors immediately underneath.



As can be seen readily, there is ample parking space for aircraft and automobiles. Not obvious from the air or the picture are the people who have brought about this solution to an ever growing problem on airports over the country. We'll see them after we get on the ground. Just now, however, (at the top of the picture) we see what a few million dollars can do. A runway and taxiway (shown in black) extension recently completed for the Illinois Air National Guard give Peoria Municipal Airport a runway of 8000 in length. This, along with the cross runways, the new building, the new Thangars, the complete services rendered to the flying public by the combined Tower and Communications Station, and the Weather Bureau are all part of what makes Peoria an increasingly popular stopping place for transient aircraft. Local response to the airport matches the strangers' enthusiasm as is evidenced by the increasing passenger loads on the airlines that serve Peoria.

Ozark and American Airlines offer convenient direct schedules to communities of interest like Springfield, Ill., Quincy, Burlington, Iowa, Moline, and last but not least, Chicago. In fact, those in the know, say you'd better make reservations several days in advance on those Chicago flights, if you really want to be sure of your seat on the airplane.

For a look at the people who work on this airport to bring about this fine service, we must seek out DeWitt Collins, the airport manager; Fred Sommer, the FAA facility chief, and Mildred Byerly, the fixed-base operator. Close, continuous cooperation among these three and the airline station managers of Ozark Airlines and American Airlines, and the Commanding Officer of the Illinois Air National Guard assure that everyone's needs are respected and that the mixed operations of military, airline, and general aviation are conducted

safely and harmoniously. A casual visitor sees only the result and that is a brisk, efficient airport serving aviation's needs in a most creditable manner.

Talking one at a time to the principals mentioned previously only brings praise for the others and gets you nowhere in finding the key to their current success. Rather, it becomes apparent that this happy result exists because of patient hard work on everyone's part for a number of years. The Tower and Communications Station is one of the earliest such combined facilities in the country. The alert crew manning the facility are well known for their attention to details. Be up on your procedures or be prepared for a courteous reminder to close your flight plan, for instance.

Quick line service is a mark of distinction anywhere, and Peoria's treatment of transients makes you want to return time and again. Prompt, reliable service in clean surroundings for all types of repairs brings customers from considerable distance to Byerly Aviation Service. Executive and private aircraft find their needs well accommodated.

The credit for this airport also extends to the Peoria Airport Authority, who meet regularly to appraise the needs of aviation in the area and arrange for necessary financing of various projects, handle details of land acquisition, and review and approve the operations of the airport generally. This group is now engaged in serious study of a second airport for the area. Just where, what, and when it will be are now unknown, but you can be sure that it will be a credit to the community and a boon to the aviation public. The exploration for the second airport also includes finding out what's under the ground. The Authority does not desire to buy another coal mine. At the present airport they had to purchase one that extends under the runways, another one of the hidden problems of this airport successfully met by the Authority.

We'll go visit another airport next month. In the meantime, stop at Peoria on your next X-C. You'll like it and join those who salute the "Pride of Peoria".

(Continued from page 4)

characters of routing and remarks. When the flight junctions from one airway to another, the preceding airway is deleted on all succeeding strips. This enables the controller personnel quickly to determine what airway the flight will be on as the flight proceeds through his sector. Also the printed strip is very legible and lessens the possibility of transposition or misinterpretation of characters on the flight plan.

Future plans are to expand this network of computers to include more air route traffic control centers. In the immediate future we hope to have controller input devices which will enable the controller to insert information direct into the computer and also have information from the computer displayed on a display panel at the sector of operation.



The following bit of light reading is credited to Orville Stinson who writes a column "THIS IS PHOENIX TOWER" for the Arizona Aviation, the monthly publication of the Arizona Aviation Authority.

Any estimate of the total number of aircraft radio transmissions directed toward Phoenix Tower in the course of a year, would pretty much have to come under the heading of a wild guess. Conservatively it should figure high in the hundreds of thousands.

Most of these fortunately are routine. However for one reason or other a few contacts manage to become particularly memorable and as such are often replayed wherever tower people congregate.

Consider if you will the Cessna pilot, who up and away with the crack of dawn, left us tied in knots with this unreasonable request —

"TOWER," he said, "I WANT TO MAKE A STRAIGHT-OUT APPROACH!"

Then there was the Commanche who became lost one evening. During the course of many transmissions bandled back and forth and all calculated to orient him in the right direction, he momentarily stood the Controller's hair on end with this little gem —

"TOWER ... I ... JUST ...
RAN ... OUT ... OF ... GAS
... (pause) ... BUT 1
SWITCHED ON THE OTHER
TANK!"

To prove that we aren't insensitive when the need for sympathy arises, we must admit we gave special treatment to a Piper pilot who attracted our attention late one night with this plaintive facual statement—

"I'VE BEEN FLYING ALL THE WAY FROM EL PASO AND I'M A NERVOUS WRECK!"

And we mustn't forget the story of the Controller who was having a difficult time of it all with a foreign-language-speaking IFR flight.

"WHAT IS YOUR ESTI-MATE OVER THE RANGE?", he queried. When the reply was unintelligible, he tried again.

"WHAT TIME WILL YOU BE OVER THE RANGE?" This seemed only to add to the confusion.

"WHAT ... DOES ... YOUR ... CLOCK ... SAY?" demanded our harassed hero finally. This struck a responsive chord, for back came a happy relieved voice.

"TEEK . . . TOCK!" said the

FEDERAL AVIATION AGENCY PREDICTS JETS WILL SET NEW SERVICE RECORDS IN 1960

Federal Aviation Administrator E. R. Quesada said pure jet aircraft will assume the predominant role in air transportation during the forthcoming year.

In a year-end statement, Mr. Quesada noted that the nation's airlines were operating more than 75 pure jets in 1959. This advent of the new high performance aircraft, he said, was accomplished with a minimum of incident and mishap. In the coming year the carriers will add 150 more pure jets. "It is thus evident", he said, "the pioneering is over. The jets have proved themselves far beyond everyone's expectations. They will establish new records for service during 1960."

FAA's Administrator pointed out that the Federal Aviation Agency will continue to align its safety programs to this expansion of jet operations. He noted that during 1959, FAA inaugurated a new program of jet flight training for its safety inspectors. This training program — conducted by the Air Force — has given FAA's inspectors the finest jet training available in the world

The increase of jet operations also contributed to a number of changes in rules and regulations affecting air carrier operations. The most significant of these was a new Civil Air Regulation effective March, 1960, that "no individual who has reached his 60th birthday shall be utilized or serve as a pilot on any aircraft while engaged in air carrier operations."

Another new safety regulation required more detailed initial training and proficiency tests for co-pilots of the commercial airliners.

The FAA, also during the year, amended the CAR's to prohibit airmen from operating if their medical background showed diabetes mellitus requiring insulin; coronary artery disease; a history of psychosis or certain other mental or nervous diseases including behaviour disorders, chronic alcoholism, drug addiction or epilepsy.

At the same time, the Agency began a series of studies on the adequacy of various oxygen systems and on sudden illnesses that might incapacitate a flight crew.

The Agency is also issuing a new rule that airborne weather radar shall be mandatory equipment on the nation's airlines.

In other regulatory matters, FAA ordered its flight inspectors to enforce by inspection the requirement that flight crew members on commercial transports remain at their duty stations during flight.

In the closing month of its first year, FAA put its safety inspectors on a round-the-clock schedule in a concentrated safety inspection program of all scheduled air carrier training programs and flight operations.

To insure that all new pilots are better trained, FAA last year inaugurated a new safety program designed to insure that uniform standards of flight instruction prevail in the nation's flying schools. Earlier, the Agency had ruled that all new commercial and private pilots must have a measure of instrument instruction in their flight training.

To keep pace with the expansion of jet operations, FAA established 30 new high-altitude jet route segments for a total of 25,455 miles. Radar surveillance for these civil jet operations was accomplished when the military permitted the Agency to man and utilize thirty-eight Air Defense Command long range radars. These supplemented FAA's

own existing long range radar to provide radar advisory service. This combined radar system enabled FAA to track all jet flights from take-off to touch-down with the exception of a small area in Rocky Mountain West.

These new jets contributed to a fourteen percent increase in revenue passenger miles flown by the nation's airlines last year. The 1959 total of approximately 35,800,000,000 was four and a half billion miles over the figure for 1958.

During the year, nine fatal accidents brought death to 257 passengers. This compared with 124 fatalities for the previous year. These fatal accidents increased the rate of passenger fatalities from 0.4 passenger fatalities per 100 million passenger miles in 1958 to 0.7 passenger fatalities per 100 million passenger miles in 1959. These fatalities were a matter of grave concern to all FAA authorities.

The expansion of jet service was accompanied by a similar growth in all fields of aviation. The number of student pilot certificates issued rose, for example, from 58,107 for 1958 to 67,714 for 1959—an increase of seventeen per cent.

This aviation growth is also reflected in the increasing volume of air traffic. During 1959, seven FAA towers reported their typical busy hours showed an average of nearly one scheduled airline landing or take-off per minute. These busy-hour averages do not include non-schedule operations.

To meet the needs of this expanding volume of air traffic, the Agency commissioned a new navigational aid or air traffic management facility at the rate of one a day for a total of 365 for the year. These included, in part, 72 approach light systems, 11

new airport traffic control towers, 18 long range radars, 9 precision approach radars, and two airport surveillance radar units. Also during the year, FAA contracted for the construction of six new air route traffic control buildings, and one new traffic control center building was put in service at San Antonio, Texas.

Early in 1959, FAA set up a new Air Space Management Program which made available 6,000 miles of new air space for civil aviation. At the close of the year, more than 100 areas were under FAA review for revocation or reduction in size or reduction of the height or hours in use.

Also during its first year, FAA installed new electronic computers at six of its busier air traffic control centers. At the same time, Agency scientists and engineers received delivery of the first components of a new fully automated air traffic control system. This giant computer, called Data Processing Central, will handle all the repetitive, nondecision making functions of the air traffic controller. Its most spectacular function, however, is its ability to probe, detect, and predict conflicts or collision courses.

FAA engineers also completed plans for the introduction of automatic landing into the national system of aviation facilities. After final development and thorough testing, all weather landing is expected to be in operation in five years. Planes will be able to land in all types of weather regardless of visibility conditions.

The testing of the automatic landing system is being done at FAA's Atlantic City test center—the first such test center for civil aviation. A former Naval Air Station, it was converted into the National Aviation Facilities Experimental Center, complete with laboratories, model shops, computer facilities and other instrumentation needed to carry out the vital evaluation and testing of new systems and equipment.

The Agency undertook approximately three thousand enforcement actions against members of the aviation industry during 1959. The penalties included civil penalties, certificate action (either revocation or suspension) and reprimands. These actions were filed against private, commercial and airline transport pilots, flight engineers, dispatchers, repair stations, mechanics, both scheduled and supplemental air carriers and air taxi operators. Sixty-five of these enforcement actions were taken against the military and these cases were referred to the Defense Department for its action.

At the Dulles International Airport outside Washington, paving was completed ahead of schedule on the two parallel north-south runways and work was begun on one of two other planned runways. Bad weather, however, halted operations in the fall of the year and this delay resulted in postponing the scheduled opening date from early 1961 to the summer of that year.

Not the least of last year's highlights was the development of FAA itself. On January 1, 1959, the new agency absorbed the functions and personnel of the Civil Aeronautics Administration and the Airways Modernization Board plus certain functions of the Civil Aeronautics Board and came into being as an independent agency.

We're Hiring Them Younger All the Time

A recent purchase order seen in the R.O. makes us wonder what all this is coming to. The following item was listed as equipment needed by ATC for the new combined Tower and communications station soon to be commissioned at Champaign, Ill.; one Highchair, Wright line, dark green, adjustable from 28" to 32" with casters. mmmmm !

DAVIS RESIGNS TOP FAA FLIGHT STANDARDS POST

Resignation of William B. Davis as FAA's Director of the Bureau of Flight Standards has just recently been announced. Mr. Davis, a veteran of more than 20 years with the Former CAA and the FAA, has been director of Flight Standards since the inception of FAA last year.

Bill Davis, who, in 1953, was appointed Deputy Regional Administrator of Region 3 in Kansas City, and later, in 1957, was named Deputy Administrator of the CAA in Washington, has accepted a position with American Airlines.

VVV

Mr. Oscar Bakke, presently Director of the Bureau of Safety of the Civil Aeronautics Board, will be appointed the Director of the Bureau of Flight Standards to fill the vacancy left by Bill Davis' resignation.

Mr. Bakke served with the U. S. Army Air Corps from 1942 to 1946 as a Command Pilot, has served with the CAB since that time in various positions dealing with accident investigations and safety regulations, and since 1956 has served as its Director. He will assume his new duties with the Bureau of Flight Standards in late January.

Radiological Problems

- 1. It will take a repair crew 4 hours to restore a VOR to operation. The dose-rate in the area of the VOR 30 minutes after burst was 700 r/hr. The crew entered the area 3 hours after the burst. What radiation dosage will they receive while in this area?
- 2. A Geiger-counter type instrument measured the intensity in a contaminated area at H+15 days and found it to be 300 mr/hr. What was the radiation intensity in this area at H+2 hours?

Answers on page 19.

A festive holiday spirit prevailed at the Christmas Buffet Luncheon provided by the Employees' Association on December 21. Baked ham, barbecued beef, potato salad, rolls, relishes and cake proved to be gourmet fare for approximately 600 employees. Coffee was furnished gratis by the Commercial Vending Company.

Helen Hazelwood, Chairman, Activities Committee, was in charge of the event — AND, we feel, duly qualifies for any catering service! Doris "carrots" Snow and Barbara "celery" Cogan also did their bit, although we understand they didn't relish it! Pat Latchford and Lola Wade arranged the beautifully decorated buffet table, and the tree and window decorations in the lobby were due to the artistry of Jewell Bates and Harry Lanham. Pretty, weren't they?

During the serving period, drawings were held and prizes given to 25 lucky ones. Lyle Underwood did a fine job selecting the gifts.

To further the spirit of the occasion, the remaining food was not sold at auction but donated to the City Mission to serve needy people.

To Helen — the many willing workers — the Association: Thanks for a job well done!



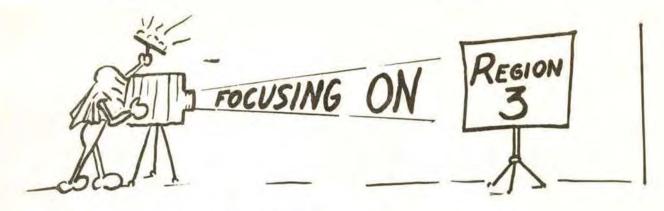
Those attending the Management Training Course conducted at Minneapolis December 14-18 were: Back row, left to right—Barney Anderson, Instructor, KC-90, Victor B. Farness, Dick Anderson, Richard Bonin, Wally Kuhr, Ben Lundblad, Mark J. Wilson, Mel Garbe, and Cleo Brock, KC-90; Middle row, left to right—Paul Kasten, K. L. Peterson, R. D. Davies, H. M. Dixon, J. Olynyk and Paul Gaydos; Seated, left to right—E. Zempke, B. Clough, E. Belisle, Harold Bishop and E. H. Kruse.







Above: Those participating in the Management Training Course, Kansas City, January 4-8, 1960, were: Front row, left to right—Donald R. Stockdale, Theodore B. Carroll, J. Paul Biddle and George M. Berg; Middle row, left to right—E. J. Thomas, Chief, Personnel Division KC-90, Carroll W. White, Lawrence H. Mijares, James H. Brasher and William Knoth; Back row, left to right, John F. Farmer, Jack H. McCleskey, Horace F. Wakefield, Virgil N. Hudkins, Addison D. Scott and Carlton G. Loomis.







General Accounting Office personnel of the Kansas City Regional Office are conducting a review of Region 3 activities related to surplus airports. The review is being conducted for the most part in the Airports Division. As part of the review, the audit team has made field trips to the District Airport Engineer's office in Kansas City and to airports at Kirksville, Mo., Great Bend, Kansas, and Vichy, Mo. Mr. Sam Pines is the Audit Manager. The photograph was taken during a visit by Mr. Robert Meisner, Supervisory Auditor from Washington GAO office. Seated (left to right) are Arthur Zago, Edwin Bland and Reyes Lopes; and standing (left to right) Robert Meisner and Sam Pines.



Civil Service Inspectors from the Ninth U. S. Civil Service Region at St. Louis, Missouri, spent the month of December inspecting the Personnel Management Programs of the Third Region. Reviewing the results of the team's inspection are, left to right, Henry L. Newman, KC-3, Edward C. Marsh, KC-2, Vernon Gilroy, Civil Service Inspector, E. J. Thomas, KC-90, James Hart and Birch Doran, Civil Service Inspectors.







Installing of equipment in the new Control Tower being constructed at the University of Illinois Airport at Champaign are, left to right, Alfred D. Fisher, Supervising Electronic Installation Technician; Donald M. Pope and Arnold Christiensen, Electronic Technicians. Commissioning of the Champaign Tower is forecast for early March.

During a recent flying trip around the Region, your Editor visited a number of our facilities and found these people working at their trade.



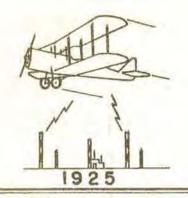
At Quincy ATCS Katie Barrnett was explaining runway lighting switches to Walt Burgin, left, while Station Chief Erwin Schroeder observes.

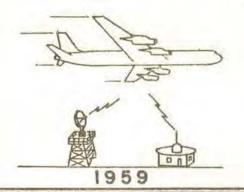
Burlington, Iowa, ATCS gave us traffic advisory assistance for landing and here we found Flight Service Specialist Paul E. Jones (left) and Melvin Hoover checking new procedures.





At Vichy ATCS, the Airport is called Rolla now, we see ATM Division Chief George Kriske discussing new ATCS equipment with Rolla Chief W. J. Mosley (left), Jack Wheeler (right), and Lawson T. Holms (seated).







TRAFFIC CONTROL "FAA'S MOST CHALLENGING

MISSION"

TOMORROW

DIVISION OFFICE

We hate to start off a new year with an apology, but our contribution to this month's issue will be a "rush job", the victim of an editorial deadline which has already caught up with us and the only way we can write up something for the ATC Division page is to do some night work after the building has been locked up and hope that when it reaches the Editor's desk in the morning it is not too late to be included. Too many activities and meetings have occurred since we came back to work on January 4 after a couple weeks absence on leave during the holiday period and the deadline for FLIGHT LINES articles slipped

VISITS: Since the December issue was published, we made field trips and visits to the ATCS at BRL UIN CBI VIH DTW LAN, the CS/T's at TOP SGF FNT MLI, the TWRs at MDW ORD LAN, and the CNTRs at MDW/STL and DTW. We might classify our visit to MLI as an "involuntary" one, since rapidly deteriorating weather between MLI-DSM caused us to make a quick 180° turn on V-6/V-8 near IOW while enroute DTW-DSM and land at MLI, where we were grounded along with all other flights for a day and a half waiting for improving WX. Our two intrepid passengers on this flight, Lyle Underwood and Bill Bruce, exercised their ingenuity and took a train home to MKC the following afternoon, a Friday, leaving COMANCHE 72P and myself to sweat out the rain, drizzle and fog until Saturday noon, confirming the slogan "When you have time to spare, go by air!"

Our most recent field trip was completed Jan. 4-7, to attend the CAB public hearing at Chicago on the Nov. 24 accident involving TWA 595 at MDW, and to attend the STL Center's ATC Advisory Committee Meeting at STL. Messrs. John Keleher, Lloyd Harold, R. S. Baran, Byron G. Smith, R. J. Geisenheyner, and W. G. Yocius, of MDW TWR, all were required to testify as witnesses at the CAB hearing on the TWA accident and all did a very creditable job in answering the many detailed questions directed to them on the witness stand by members of the CAB and other agencies represented at the hearing. While there was no criticism of the MDW TWR in the handling of the aircraft involved, we are always able to profit by minor items that come to light as the result of such detailed and searching investigations and can improve our procedures and make them more airtight in anticipation (that isn't exactly the right word) of "next time". We strongly urge any of our personnel who have an opportunity to attend a CAB accident hearing as an observer to do so - it is educational, to say the least, and will quickly emphasize the need for following standard operating procedures that are laid down for controllers and communicators and, above all, the need to think before acting.

This trip to Chicago was particularly interesting for me, in that it afforded my first opportunity to travel via helicopter and civil jet - MDW-ORD via Chicago Helicopter Airways, and ORD-MKC via CAL Flight 11 (Boeing 707) in the cockpit. The ORD departure on Runway 14R with a right turn out afforded an opportunity to observe the distance and turn radius after takeoff which frequently shrinks the between ORD-"buffer area" MDW radar vector area to a zero or minus quantity when the civil jets are involved; however, CAL 11 made the turn within 2 miles of the end of the runway in this instance.

We also had a good opportunity to observe the radar handoffs between ORD Departure Control, MDW Center, Goldfish GCI, Hogarty GCI, Kansas City Center, and Kansas City Approach Control during the progress of this flight between ORD-MKC, including the application of radar separation between another "707" descending through our altitude (FL 250) near BDF and a subsequent radar steer the captain of CAL 11 requested when Goldfish gave us "traffic, 12 o'clock, 20 miles, northeastbound high speed beacon target" which turned out to be at FL 270 when he flashed by us like a meteor passing about 5 miles off our left wing. Since this was a night flight and we were above an undercast with good visibility we were able to see the lights of our traffic in both instances - if you were quick, that is, as our TAS was 488K. 56 minutes from takeoff at ORD to landing at MKC - that's the way to travel, although it spoils you for the less glamorous types of aircraft, including a COMANCHE (TAS 150K)

Our visit to STL the following day was to attend the regularly scheduled ATC Advisory Committee Meeting, the first one we have attended at STL, since preceding meetings always seemed to fall on dates we have been either out of town on other trips or otherwise tied up by conflicting commitments. We can now claim attendance at each of the Center's committee meetings, one or more times.

NEW FACES: Since the December issue, we have some new personnel assignments to report. First of all, three new Resident Inspectors (ATC) have been added to the Operations Branch staff at the following locations: AI Rounds, formerly MDW TWR, to Kincheloe AFB, Sault Ste. Marie, Mich. (J. W. Murphy goes from Kincheloe to K. I. Sawyer AFB at Marquette); Jackson P. Cresap, formerly OMA TWR/RAPCON, to Grand Forks AFB, N. D.; and Peter P. Meier, formerly ICT TWR/RAPCON, to Minot AFB, N. D. They will all report for duty at their respective locations during the latter part of January.

Planning Branch gets a new face, in the person of James O. Dixon, most recently from FAA Bureau of Research & Development at NAFEC Atlantic City, who will work in the Airspace Section. Jim is not exactly a newcomer to us, since in reverse order from his assignment with BRAD he was ATC Specialist with Headquarters, CADF at Grandview, Mo., prior to that in a similar assignment with Air Proving Ground Command at Eglin AFB, Fla., and prior to that was in the Kansas City Center and Tower for a number of years. He should be reporting any day now.

The most recent "new face", based on a selection by our ATC Personnel Selection Committee today, is a new CARF Chief, Addison D. Scott, Watch Supvr., Kansas City Center. "Scotty" will replace the former CARF Chief, Bob Bounds, who is moving into the FAA Liaison Officer job at Hqrs. 2AF (SAC), at Barksdale AFB, La., which is under the SACLO at Hqrs. SAC and the Military Command Liaison Division of the Washington Office.

SATISFIED CUSTOMERS: Harold Simpson, of Olathe RAP-CON, received commendation from Bill Miller, FIDO #1 KCK, and the Chief, Flight Inspection Branch (KC-680) for his prompt and efficient radar identification, and vectors given to Bill in a FAA Flight Inspection aircraft that had experienced an engine failure shortly after takeoff from KCK in IFR conditions on Dec.

11, which placed the aircraft immediately in position for an ILS approach and landing at TOP so that the in-flight emergency was terminated successfully. Both Harold and Bill deserve congratulations.

Another letter, from the Commander, 14th FIS, Sioux City, Iowa, states that commendations are due to J. W. Hoffman, Russell Haga, A. J. Nugerten, Thomas B. Davis, and Lyle Becker, all of SUX TWR, plus L. C. Vail, MCW ATCS, for their alertness and efficient handling given to three F-86L aircraft of the 14FIS on Jan. 5 which experienced simultaneous airborne emergencies resulting in one aircraft making emergency landing at Spencer, Iowa, due to engine trouble, the second aircraft making an emergency landing at Ft. Dodge due to fuel shortage, and the third aircraft making an emergency landing due to fuel system malfunction at SUX. In the latter case, a NAVION was also in the SUX traffic pattern unable to lower the landing gear. The MCW ATCS, with L. C. Vail on duty, rendered valuable assistance to the two F-86L's that landed at Spencer and FOD by alerting the Spencer Fire Dept. of the impending emergency landing and furnishing the aircraft that landed at FOD with essential information, since there are no communication facilities for military aircraft at that location. Needless to say, we are always happy to learn of incidents such as the foregoing, which indicate our personnel are "on the ball". These reports are illustrative of many incidents where our people in the field have been instrumental in saving both lives and property, the monetary value of which would be difficult, if not impossible, to compute and, at the same time, bring credit to our organization.

WRONG WOMAN: We take this means of correcting a publication error which occurred in the December issue of FLIGHT LINES, on page 13, under the caption "Dolls". For the record, let it be known that Al Draken-

berg, of our Inspection (Analysis) Branch, married Virginia Ramirez, who was, prior to the ceremony, a stenographer in that same Branch; notwithstanding the footnote that appeared under Mary Stansbury's brief biographical item, which obviously led uninformed persons, not "in the know", to believe that she (Mary) was the party of the second part. Since the publication was already out while Al was enjoying a honeymoon in Mexico City, and he and Virginia were unaware of the error, we were thinking of sending him a telegram (collect) advising him that according to published information he was honeymooning with the wrong gal! Mary will undoubtedly carry the identity of "Al's other wife" for some time to come; however, we have tried to set the legal record straight by this explanation. If you are still confused, please contact Drakenberg for further details,

DREAMS DO COME TRUE: A press release last week finally confirmed tangible evidence of the new Kansas City Center building that will be constructed at Olathe, Kansas, in an announcement that bids have been accepted from a contractor for construction of the new facility at an approximate 1.5 million figure.

Today, Jan. 12, following a meeting between representatives of the Washington Office, ANF Division, ATM Division, Lease & Utilities Section, AT&T, and Southwestern Bell TELCO at the Regional Office to discuss landline requirements for the new Center, George Smith, MKC Center Chief, was carrying a brochure of photographs of the new Cleveland Center building at Oberlin, Ohio, to show his personnel, since the new Kansas City building will look very much the same. If you have not seen them, these pictures show a very impressive and spacious building, the likes of which no one and I mean no one, who has worked in our present and past centers, can conjure up in their wildest moments of imagination.



NEW YEAR'S RESOLUTIONS

George Ireland, R.O., Remove the knob from the steering wheel of his car.

Leslie Eichem, R.O., Obtain more first-hand information on the weekend surveillance activities of one - man district offices, with special emphasis on those staffed by maintenance inspectors and located in the Ozarks.

Lee Covert, R.O., Never to mix martinis and black cigars.

Ed Joyce, Indianapolis, Fly a minimum of 200 hours on flight tests in 1960.

Ida Travis, secretary at Des Moines, Make all future trips by air and without a bottle.

John Smith, Wichita, Stop trying to persuade the GSA to hotrod Government automobiles.

Fritz Rieger, Rapid City, Place the Jungle Club in Kansas City off limits.

Helen Leighow, R.O., Reduce office collections to not more than one a week.

Chet Carver, Springfield, Mo., Reduce his fishing in order to increase weekend surveillance.

Jim Christopher, R.O., Answer questions in one word; yes or no. (He sure can write.)

★ ★ ★ Things I Would Like To See

Paul Cannom and Ed Joyce admit that they make an occasional mistake.

Dave Detamore and Preston Kirk have a violent argument on the respective merits of Operations and Maintenance.

Tom Murphy convince Chuck Cornwall and Ed Joyce that a change in climate and locale should take place every two or three years; Cornwall and Joyce applying for mutual transfer. Lee Covert tell Dave Detamore that he can have the FAA Beech to visit one of the District Offices.

George Ireland having difficulty making up his mind.

Tom Davis giving a cursory review to an accident report and sending it to Washington.



"LOOK MOM - NO PROPS !"

This is the photo of Ed Richardson, Operation Inspector, Detroit, who is now prepared to accomplish his ATR flight test on a light twin aircraft.

You can tell by that satisfied look of accomplishment on his face that he feels well qualified and is ready.

We are looking for volunteers to conduct the flight test—please submit names to the Regional Office.

BIOGRAPHIES

There are many new faces in the General Safety Division. We have had the opportunity of getting acquainted with two of them.

Jim Purcell, Operation Inspector, reported for duty in the Regional Office in November. Jim hails from Mission, Texas, and his home is in southern Georgia. Jim's experience in the aviation industry stems back to World

War II as a pilot in the Air Force. After mustering out, he spent a short time as an instructor in a Civilian Flight School and then accepted employment as a flight instructor in the Air Force Primary School at Mission, Texas. When he left, he was Assistant Safety Supervisor and comes to our organization with an excellent record.

The first thing Jim did after reporting in Kansas City was to buy a complete set of winter clothes for himself and his family, a set of snow tires for the automobile, and an electric blanket for his wife.

With a truly genuine interest in his employees' well-being, Lee Covert promptly assigned him to the "garden spot of the North"—Fargo, North Dakota, and Jim accepted the assignment with true southern gentlemanliness.

When last heard from, Jim, his wife, son, and daughter, none of whom had ever seen snow or experienced below freezing weather, were headed north with all of the cheerful anticipation of Admiral Byrd treking to the North Pole.

We hope to get him out of Fargo sometime in the next ten to twelve years.



* * *

Another new-comer to FAA is Ronald Whittemore, who was assigned to the Maintenance Branch. While his transition was not so extreme climate-wise as was Purcell's, the transplanting of a native New Yorker can be just as disturbing. Ronald is the new Electronics Inspector, replacing Jim Parsons,

Ronald is a native of Brooklyn, New York. He attended the New York City Community College where he studied electrical technology, majoring in electronics. He was employed by the Department of the Air Force for 14 years as an aircraft electrical and electronics systems repairman in California, Pennsylvania, and New York. He served as General Foreman of the Electronics Branch at Floyd Bennett Field until its deactivation in 1957. Ronald went to work for the Ford Instrument Company, where he was employed as a Quality Control Engineer on missile guidance systems, airborne navigational computers and gun firing computers. After leaving Ford Instrument Company in 1959, he was employed by the Liquidometer Corporation of Long Island City, New York, as a Field Service Representative where he serviced electronic fuel gauging systems and components for DC-8's and 707's.

In addition to his duties in the Branch, he will be expected to keep all TV's in the division in tip-top shape.

You gals will have to look out. Ronald is single and, quote, "available!"

* * *

Other recent additions are:

Gerald P. Abler, Operations, GSDO #2, EOD 12/7

Mack C. Hogan, Operations, GSDO #10, EOD 11/30

Robert K. Schafer, Operations, GSDO #13, EOD 11/2

Harold W. Phillips, Maintenance, GSDO #4, EOD 10/5, Carroll E. Philbrick, GSDO #2, transferred to Region 1, and Kay Kessler, secretary for KC-250, resigned to accept a position with the Rotary Club of Kansas City, Missouri.

RADIOLOGICAL NEWS

Ten ANF field personnel completed the 5-day OCDM Radiological Monitor-Instructor Course at Battle Creek on December 16. They are: Henry W. Sarnwick, Disrict Supervisor, ATDO 14, Indianapolis; SEMT's Ralph H. Bolick, Springfield, Mo., and Elmer C. Cottle, Malden; EMT's Don C. Leabo, Fargo; and Arthur C. Kepner, Grand Forks; REMT's Hugh S. Weeks, Green Bay; Frank J. O'Brien, Omaha; Leander P. Rademacher, Madison; Harold J. Pierson, Goodland, and Fred A. Nicol, Sioux Falls. This brings to a total of fifty ANF personnel who have received Radiological training.

An FAA Radiological Byproduct Certificate has been devised and is being printed. Perhaps by the time you read this these certificates will be issued to all personnel who have received training. This certificate will entitle the holders "to receive, acquire, possess, use and transfer by-product materials", specifically the Cobalt 60 source sets used in training.

A procedure is being worked out which provides for routine corrective maintenance checks of radiological instruments. Under the procedure, if an instrument doesn't work but is repairable, it will be sent to an OCDM instrument shop on a repair and exchange basis. As soon as we get sufficient copies of the OCDM instructions to make distribution, the new procedure will be put into effect.

* * *

ANSWERS TO RADIOLOGICAL PROBLEMS

1. 200 r.

2. 150 r.

FAA TO THE RESCUE

Last December 11th one of the FAA Flight Inspection DC-3 aircraft, N-20, was forced to make a single engine landing at Topeka, under quite low weather minimums. Seems that Pilot Bill Miller from FIDO #1 at Fairfax and crew were chugging along normally, headed for Salina when, about over Winchester intersection, the right engine gave up the ghost and was feathered.

An emergency landing at Topeka was requested and with the help of Olathe Approach Control, N-20 was vectored into position for an ILS approach to Topeka. Weather at Topeka at the time was 500' with 1 mile visibility and wind northwest 10. Miller elected to land downwind to make use of the ILS facility and a successful landing was made on Runway 12.

The crew of N-20 made special mention of the efficient manner that Controller Harold Simpson of Topeka tower handled the emergency situation. Miller may be wondering about things — in twenty years of CAA-FAA flying he flew seventeen years without an engine failure and has had three in the last three years, two of these under IFR conditions.

BABY BOVINE BASHES BIRDMAN

An unusual hazard to flying presented itself in the form of a young calf recently, according to an accident report filed by Inspector Johnston of the GSDO office at North Platte, Nebr.

It seems that just as the pilot of a Cessna 172 was attempting to take-off a calf ran out from behind a haystack and tangled with the aircraft. Fortunately the pilot was not injured in the ensuing crash but the aircraft, not being calf-proof, suffered a damaged landing gear and horizontal stabilizer. Best we all look behind haystacks before take-off!











PERSONNEL HI-LITES

Employee Development Officers, Cleo A. Brock and Bernard M. Anderson, conducted a 40-hour Management Course at the U. S. Naval Air Station, Wold-Chamberlain Field, Minneapolis, the week of December 14, 1959. Eighteen supervisors attended the instruction at Minneapolis. Course instruction included: Responsibilities of a supervisor, 2 hours; Work Improvment, 6 hours; Production, 6 hours; Training, 8 hours; Human Relations, 16 hours, and Concept of Leadership, 2 hours.

The Employee Development Officers also presented a ten-hour Human Relations Course at Minneapolis the same week.

A ten-hour Writing Improvement Course was conducted during the week of December 14 at Minneapolis. Twelve FAA employees attended sessions which emphasized shortness, simplicity, strength and sincerity in Writing.



Attending Writing Course are, left to right: Stanley A. Sievertson, James D. Christian, Theodore S. Baran, Vic Stein, Butler H. Gregory, Robert A. Johnson, James Hobbins, Leay C. Sorenson, Jr., Oran K. Haggbloom, Edwin R. Berg, Thomas Purnell, and Cleo Brock, Instructor, KC-90.



Left to right: Robert E. Jenkeski, George Smith, Center Chief, and Wilbur J. Bandler.

In an award ceremony at the Municipal Airport this morning Robert E. Jenkeski, 5020 North Park, Kansas City, Mo., and Wilber W. Bandler, 11211 Palmer Ave. Hickman Mills, Mo., Air Traffic Control Specialists of the Federal Aviation Agency, were presented FAA Certificates of Award signed by Leonard W. Jurden, FAA Regional Manager and Award checks. Specialists Jenkeski and Bandler are employees of the Kansas City Air Route Traffic Control Center.

The Awards were presented by George D. Smith, Chief Controller of the Air Traffic Control Center, who congratulated the employees for their high level of performance over and above the requirements of their position in the planning and installing of a communications system in the Center training quarters. It was stated that their efforts had contributed materially in training controllers of the air control facility to effectively meet the requirements of the jet age. The Kansas City ARTC Center is responsible for the control of all instrument flight rule traffic in a five state area.

Leon H. Turk of the Kansas City Air Traffic Communications Station recently received a Suggestion Award and Certificate for his development of a new method concerned with transmission and relay of radar weather report summaries. Presentation of the certificate and check to Turk was made by the ATCS Chief Frank Gaynor at a ceremony held at the office, as shown in the photograph below.

Adoption of the suggestion will eliminate lengthy summaries subsequent to the scan period in accordance with procedures for urgent flash advisories and severe weather warnings,



The Proficiency Development Branch will conduct 40 - hour Management Courses as follows during the remainder of fiscal year 1960: St. Louis Center, January 18-22; Omaha, February 29 to March 4; Regional Office, March 21 to April 1; Milwaukee, April 18-22; Wichita, May 23-27.



REVIEW OF NEW ENFORCEMENT PROCEDURES

Based on First Year Under New Act

One of the significant provisions of the Federal Aviation Act of 1958 was that which granted to the Administrator the authority to alter, suspend, modify, or revoke airmen certificates. Under the prior Act, it had been necessary for the CAA, acting in the role of a prosecutor to file complaints with the Civil Aeronautics Board. Only that agency could suspend or revoke a certificate. During the drafting of the new Act, it was generally agreed that a new method was required which would provide for speedier certificate action. This was necessary in the interest of providing better justice for the airmen involved and to obtain greater compliance by the agency.

The first year of operation under the new law has now passed, and it is our view that this grant of authority has been utilized in this Region with fairness and dispatch. During calendar year 1959, the office of the Regional Attorney has handled 850 Violation Reports with 306 cases involving certificate actions, seeking of suspension or revocation of certificates. There have, to date, been only five appeals to the Civil Aeronautics Board from Orders issued in these cases.

Under Section 609 of the new Act, it is provided that every airman shall be given an opportunity to be heard prior to the issuance of a certificate order. Pursuant to this statutory directive, each Notice of Certificate Action advises the airman that he has an opportunity to be heard in person at a General Safety District Office nearest his residence. During the calendar year and out of the above-indicated 306 actions, there have been 84 hearings requested by airmen in this Region. This number represents approximately 27 of the total. Of these, 69 hearings have been held and 15 are set for hearing at an early date.

In discussing the safety enforcement function, the Administrator early proclaimed that enforcement actions should be governed by four primary principles. Actions should be handled in a fast, factual, fair, and firm manner.

In enunciating a policy of fast handling of enforcement matters, it was recognized that effective enforcement requires prompt action. The enforcement procedure provided under the new Act was clearly directed to this end. The emphasis on factual and fair handling is of even greater importance. The innocent must always be clearly differentiated from the guilty. All pertinent facts must be obtained in every case and the action taken commensurate with the violation involved. Also, law enforcement without firmness is ineffective. Violations are to be investigated, reported, and appropriate action

How have the new enforcement procedures helped obtain these goals? The new procedures have without question furthered the objective of fast handling of enforcement cases. Under prior procedures, it was a rare case which could be completed within six months of the date of the violation. Under the present system and assuming the initial report is timely filed, it is a rare case which is not pursued to its

completion within this period. In a routine case it is not unusual, under the new procedures, for an action to be completed within 30 days of the date the Notice is filed.

An early indication of the expedition with which new procedues would work was the manner in which the second case filed under these new procedures was consummated. In this case, one involving a serious violation, and in which the private pilot certificate was finally ordered revoked, the Notice was prepared on January 13. Eight days later the Order became effective when the airman surrendered his certificate. This same airman had been previously involved in a less serious violation and under the old procedures a period of several months elapsed between the filing of the complaint and the decision and this was only possible because a hearing was granted almost immediately by the Board, a very rare occurrence.

We also believe without question that the new procedures have stimulated the fair and factual handling of cases. Only 1.6% of the airmen, whose certificates were ordered suspended or revoked, chose to appeal our Order to the Civil Aeronautics Board.

While it may be alleged that the small number of appeals is merely indicative of the complexity and cost involved in pursuing such appeals, we do not believe this to be the case. An airman may be heard on such an appeal just as easily as he was previously heard under the old procedures by the CAB. On appeal, cases are still presented to the Hearing Examiner with a further appeal to the Board. An airman may proceed either with or without counsel at such hearings. We do not believe that either the complexity or cost of pursuing

these appeals is so prohibitive as to have prompted the small percentage of appeals which have been taken. We prefer to believe it is because our handling has been fair and the cases in each instance supported by factual evidence.

While the new procedures have not altered the method of investigating, reporting, or reviewing violations, it has, to a great extent, emphasized the necessity for fair and factual handling. Whereas, under the old system, this office merely acted as a prosecutor presenting its case to an Examiner, we are now sitting in the posture of an Examiner ourselves. The assumption of this posture has lent greater emphasis to the necessity for fair and complete investigations, for the presentation of factual reports, and for the careful analysis of each matter before the issuance of an Order. We believe the acceptance by airmen of over 98 per cent of our Orders, without appeal, speaks for itself.

While it is difficult to establish by statistics that the new procedures have promoted greater firmness in the handling of enforcement cases, we believe that our experience would generally support the conclusion that they do permit the agency a better opportunity to take the action best calculated to protect the public interest. We believe the new procedures provide, in two respects, better tools for obtaining this goal. In the case of certificate actions, the present procedures give this agency complete control over the initial sanction sought. In those cases where further discussion with the airman or further investigation clearly indicates the necessity for a lesser sanction or a different type of sanction, this may be done immediately. We need no longer go through the cumbersome procedure of requesting the Civil Aeronautics Board to give up jurisdiction and permit our election of another course of action.

In those cases in which an informal hearing is requested, the new procedures provide an additional benefit. We may now discuss the case informally with the violator, explain the position of the agency, point out the seriousness of the violation and discuss with him the relation of the sanction to be imposed to the violation.

Under the old procedures, there was little opportunity to informally provide such an explanation to the violator and often he would leave the hearing room, hostile to both this agency and the Civil Aeronautics Board. It is a rare case where the airman involved is happy with an Order which suspends or revokes his certificate. However, under the new procedure, he is generally more satisfied, having been provided with full information and a clear understanding of the basis on which the determination was made.

The necessity for the adoption of modern procedures is clearly indicated by the ever increasing magnitude of the Regional enforcement program. In 1959, there were 1253 enforcement actions, including 873 Violation Reports and 380 memoranda for the files (cases handled at the District Office level). This total includes only general aviation cases.

In-addition to the 306 certificate actions, 271 reprimands were issued by the Regional Attorney's Office and 207 cases made the subject of a civil penalty proceeding. The vast majority of the latter were settled by the acceptance by the agency of a compromise offer submitted by the violator. The FAA in this Region collected approximately \$12,725 during 1959. An additional 66 cases were either referred to other Regions, filed for record purposes only, or no action taken because it was determined that there was no violation.

The results of the first year's operation under the new procedures has been most gratifying. They have resulted in benefits both to the airmen involved and to the general public whose interest is so intimately involved in all cases involving air safety and have given needed impetus in approaching the goal of fast, fair, factual and firm handling of enforcement cases, the criteria enunciated by the Administrator.

* * *

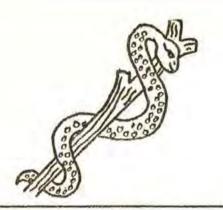
FAA GIVES LIGHTPLANE OWNERS BREAK ON REPAIRS

Lightplane owners are getting a break from FAA's action in rescinding a Civil Air Regulation which allowed only air carriers, repair stations or manufacturers to inspect single-engine, fixed wing aircraft for airworthiness.

FAA's new amendment, which became effective Dec. 8, allows such inspections to be made by any certified, inspection-authorized mechanic. This of course, will benefit aircraft owners who live some distance away from a repair station or an aircraft plant.

The new amendment also drops a requirement that an aircraft employed temporarily for experimental work be inspected again before it may be returned to its former use.

FAA is nearing completion of installation of a system of domed pancake runway lights in the runways, taxiways and highspeed turnoffs at the National Aviation Facilities Experimental Center. The pancake lights will be tested for satisfactory performance of two kinds of functions. In one they will serve as runway centerline and narrow gauge landing lights, and in the other as high-speed taxiway turnoff lights to guide pilots from the runway to a taxiway. Night landing tests will start soon.



MEDICAL MEMOS

REGIONAL MEDICAL OFFICE

FOR YOU STOCK CAR ENTHUSIASTS

Recently a Colorado safety car, hailed by its designers as "the answer to the problems of saving lives through adequate passenger packing in automobiles."

Dr. Horace E. Campbell, a member of the AMA Committee on Medical Aspects of Automobile Injuries and Deaths, and two other Denver physicians, Drs. Murray Gibbens and M. L. Gibson, represented the medical profession in the redesigning of one of Detroit's products to make it a safer vehicle. As members of the Colorado Safety Car Committee, they worked with safety engineers for more than a year and a half to develop the car.

"We incorporated many of the safety devices to demonstrate how a stock car can be customized and be made as safe as possible," said Dr. Campbell.

Among the features included in the safety car are individual seat and shoulder belts, padded dash board, interior surfaces, and steering wheel, and recessed impact points.

The exterior of the car was redesigned to lessen the chances of serious injury to pedestrians. Bumpers were modified and all protuberances removed and hard paint finish was replaced with a nonreflective paint to reduce glare. Collapsible fold-away mirrors were installed in the interior and a periscope screen installed above the windshield. The overall strength of the car was increased through installation of a heavy roll bar, point of impact reinforcement, and safety door locks. All air vents into the car were redesigned to reduce the inhalation of carbon monoxide.

The foregoing is NOT one of our fields of endeavor, but because of the ever-increasing interest in stock car building and racing, we thought we would include it in our various items for this page.

* * *

Hunters and others using small auto trailers were warned by the government against the danger of gas poisoning from small portable gas heaters. At least 16 deaths from carbon monoxide poisoning due to faulty bottle gas heaters have been reported.

STILL A WARNING

Nearly 25 per cent of the dry cleaners checked in Charlotte, North Carolina, are using plastic bags with almost life-sized Santa Claus figures, reports AMA's Committee on Toxicology.

Efforts by AMA and other groups to point out the deadliness to children of the plastic bags is being undermined by sale of the Santa-decorated bags, the committee said. Other reports have been received of plastic bags embossed with soldiers' uniforms, comic strip characters and other designs which lead to their use as a toy.

The committee still is getting reports of children who have been suffocated while playing with plastic bags in their homes.

V V V

I have often said you'll never die laughing; but this was just my way of stressing the desirability of good cheer. Actually, laughter can be a strain and a hazard, under certain conditions.

VVV

At any rate, a student at Yale wants to know how to put into one word the fear of laughing—in his case because of a broken rib. I recommend "gleophobia", a word derived from the Greek gelos (laughter) and phobos (fear).

VVV

Cut your finger? Need a Band-Aid? We have one. Gotta headache? Our aspirins will do the trick. Or an upset stomach? We will do our best to help you if you stop by our office.

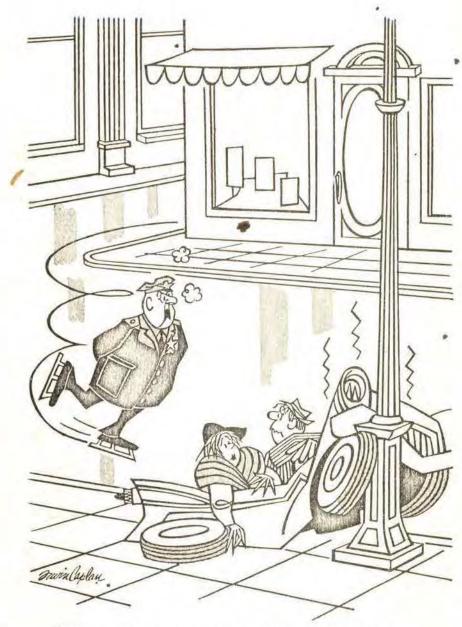


(Continued from page 5)

ways, Mr. Tippets expedited the installation and expansion of new air traffic control facilities and air navigation aids and other key elements in updating the nation's airways.

While director of the Office of Air Navigation Facilities in 1957, he was cited by the United States Civil Service League for outstanding public service. A year later, the Department of Commerce awarded Mr. Tippets that Agency's Gold Medal for exceptional service.

As Chairman of a number of United States delegations to the International Civil Aviation Organization (ICAO) and other international groups, he has been instrumental in obtaining standardization of air navigation facilities on a world-wide basis. He has served with both the Air Coordinating Committee and the Radio Technical Commission for Aeronautics.



"YOU CAN'T SAY I DIDN'T WARN YOU FOLKS THE ROADS WERE IN ICY CONDITION."

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