



ALASKAN REGION

INTERCOM

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

January 25, 1980

FAAer Battles Bethel Blaze



2 Cover Story

'Inferno' at 65 Below

When Bethel's newly-remodeled Alaska Commercial Company store at Bethel was swept by fire, directing the fire fighting was Volunteer Fire Chief Timothy Reed, Bethel FSS specialist. Tim and his colleagues fought the blaze for more than 14 hours and it was due to his all-volunteer Airport Crash and Fire Rescue Unit that the U. S. Post Office was saved. Other FAA members of the unit include Frank Charles, Fred Jack, Robert Atkins, Elias Venes and Lowell Anagick. "Truly an outstanding public service accomplishment by FAA employes at Bethel and other volunteers," said Bethel FSS Chief David A. Brown. Bethel's newspaper, "Tundra Drums" in describing the fire said it was a "blazing inferno" fought in 65 below zero weather (with chill factor) with explosions continually rocking the building. Kudos for Tim and his colleagues!

LETTERS WE LIKE TO GET

The following letter, just received by the Regional Director from J. Neal Large, Principal, Northway school, testifies to the outstanding community relations of all FAA elements at Northway--and the type of relations the agency strives for throughout the region:

"FAA personnel at Northway have contributed so much toward community relations and educational programming that it will be hard not to overlook some things they have done. Included are a new score board for the gym, help with constructing a hockey rink, furnishing lights for same, tennis courts and community use; Homemakers' Christmas gifts to all children in the village, the school carnival, the turkey shoot, dog mushers races and many others. Vital to the school and community is availability of the FAA fire truck. The fire truck and crew recently responded to an accident near the school involving a propane gas truck. Knowing they were there and had the situation under control gave us a real sense of security. The Boundary Club and Homemakers Club held various fund-raising activities for school and community projects.

"Northway students have been traveling to various communities for activities such as basketball, hockey, etc., in a 1965 school bus which was in poor condition. A local businessman contributed a new engine and necessary parts to completely overhaul the unit. Lyle Cronk and his son, Matt, and Al Nowland voluntarily removed the old engine, installed the new one and put the bus in top condition for the school. They gave their own time included at least three weekends so we would have a safe means of transportation for our students, especially in weather 40 below zero or lower.

"I would like to commend the following: Mr. and Mrs. Al Eggobrotten, Mr. and Mrs. Al Nowland, Mr. and Mrs. Lyle Cronk, Mr. and Mrs. William Greffe, Mr. and Mrs. James Burton, Mr. and Mrs. Charles Watson, Ms. Jane Glazier, Harvey Nodine, Douglas Stockwell, Mike Riley, Roy Sam and Talbert Felix. And I should mention the assistance of their older children in many of the projects.

"You can well be proud of the members of the FAA in Northway. I know your agency must have some way to commend these people, collectively and individually for their efforts toward making Northway a better place to live for both Natives and whites.--J. Neal Large, Principal, Walter Northway School.

CIVIL RIGHTS POLICY STATEMENT

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Equal opportunity is every American's birthright. It is a truth that we hold to be self-evident: that all Americans are created equal and endowed by their Creator with certain unalienable rights.

At the Department of Transportation, we are committed to advancing that fundamental truth and honoring that birth-right. In hiring practices and promotions, in the delivery of the transportation services we fund, and in the business opportunities our contracts and grants provide, the Department of Transportation will vigorously pursue the full and equal participation of all Americans whatever their race, creed, color, religion, sex, national origin, age or handicap.

By our aggressive and affirmative implementation of this commitment we keep faith with the people of our nation, who expect no less, and with the spirit of our nation, which promises no less. Each of us who enjoys the benefit of this birthright must, therefore, be held responsible for its implementation: I am responsible, and I hold each of you responsible. For unless we succeed in this area of human rights, we cannot truly succeed in the rest of our work.



A handwritten signature in dark ink, appearing to read "Neil Goldschmidt".

Neil Goldschmidt
Secretary of Transportation



Hats Off to...



Robert Yerkes (right) is presented his 3-year service pin by Project Coordinator, Ken Odsather. Ken also informed Robert that he had been selected for a permanent position in F&E.



Pictured at their last class meeting before graduating are the members of Mary Stearn's class "Effective Public Speaking." Pictured are (standing left to right) Moderator Mary Stearns, Lee Peterson, Robert Baldwin, Freeman Lathan, Ken Peavyhouse, Phyllis Taylor, (seated left to right) Deanna Barbarick, Muriel Girardet, Dottye Granthum, Carla Follett and Phylis Hill.



ATCS Developmental David Long, Anchorage FSS/IFSS, is shown with a Letter of Commendation he received for excellent performance of duties.



Deputy Chief Mickey Long (right), Fairbanks FSS, presents ATCS Phyllis Bremer, Fairbanks FSS, her 3-year service pin.



Joe Hunt, Regional Safety Officer, and Virginia Hyatt accept the First Place Plaque on behalf of the Central Alaska Field Safety and Health Council, which has been selected by the Department of Labor as the best in the nation.

The Alaska Council is made up of safety officers and safety representatives from virtually all Federal agencies with offices in Anchorage. Hunt is chairman of the council.

The Department of Labor bases its evaluation on the activities of Safety and Health Councils on accomplishments, membership and attendance, meetings and programs, and activities set forth in the annual reports.

THINK

SAFETY



From 1900 through 1975, motor vehicle deaths totaled 2,100,000. American battle deaths in all 20th century wars — both World Wars, the Korean War and the Viet Nam War — add up to less than one-fourth that number — 425,783.



Relief Technician Ed Bulliet (left), is presented a Letter of Commendation by Anchorage International Radar/Data SET Tom Messick.



For performance of assigned duties from February 1979 to October 1979, Starr Dhabolt, Anchorage FSS/IFSS, is presented a Special Achievement Award by SATCS Robert Conklin.

THE NEWS IN BRIEF

President Carter has signed the Experienced Pilot Act of 1979 directing the National Institutes of Health (NIH) to study the medical justification for the age-60 retirement rule for airline pilots. Among other things, the study will determine the latest medical evidence concerning the effect of aging on the ability of persons to perform as pilots with the highest degree of safety. Originally, this bill would have extended the retirement age to 61½ pending the outcome of the study but this provision was dropped before passage Flexitime or flexible work schedules went into effect (continued on page 7)

BOND URGES COMMUTERS TO IMPROVE SAFETY RECORD

"No matter how you cook or juggle the statistics on commuter accidents, they add up to a safety record that is unacceptable," Administrator Bond told participants at the Commuter Air Carrier Safety Symposium on January 16 in Reston, Va. He noted "In 1978, commuters had 3.93 accidents per 100,000 hours of flight, whereas the locals (local service airlines) had only .55. This is nearly eight times as many accidents per hours flown. And we're not comparing apples and oranges here, (continued on page 7)

FSS AUTOMATION PROGRAM MOVING INTO HIGH GEAR

The agency has awarded competitive contracts totalling \$12.8 million to three companies to design computer systems for automating FAA's flight service station network. E-Systems of Garland, Tex., received an award of \$3.7 million, LOGICON of San Diego, Calif., \$3.5 million and Ford/Aerospace of Palo Alto, Calif., \$5.5 million. The contracts call for a one-year design verification effort in which the three companies will demonstrate the basic capability to produce a system that can provide flight service specialists automatically with the information they need to brief pilots on weather and other critical aeronautical information. This would be a system of mini-computers that would automatically process and store this data for immediate call-up on TV-like displays at the specialists' positions. The system will also offer the pilot direct access to the same data using communications terminals, push button and dial-type telephones. Currently, specialists get this info from teletype, charts and other reports, which involves a great deal of clerical work. The agency estimates that the present system would require 11,500 flight service specialists (continued on page 7)

Take
stock
in America.



BRIEF (from page 6)

at the Southwest Regional Office in Fort Worth on January 13. An employee's eight-hour day, plus 30 minutes for noon break, may start at 7:30, 8:00, 8:30 or 9:00 a.m. The switchboard will be open between 8 a.m. and 5:15 p.m. Calls will be handled by the communications center at all other times The Civil Aeronautics Board reports that 10.5 million passengers rode Commuter airlines during the 12 months ended June 30, 1979. This is a gain of 13.9 percent over the same period for the previous year. A total of 267 carriers were active during the period, serving 819 airports and over 2,600 city-pair markets FAA has extended the comment period for its controversial notice of proposed rulemaking that would require commuter air lines and air taxi operators to establish anti hijacking programs. The two-week extension will allow interested parties to comment on proposals discussed at the January 10 consultative meeting on this subject. The new deadline is February 11 Administrator Bond and Deputy Administrator Taylor will head a list of distinguished speakers at the two-day conference on "New Engineering and Development Initiatives--Policy and Technology Choices." Scheduled for January 29-30 in Arlington, Va., the FAA-sponsored meeting will give the people who make and use airplanes a chance to get together with the people who regulate aviation to discuss future development of the National Airspace System.... The agency has issued a third edition of a guidebook aimed at making air travel easier and more convenient for handicapped and elderly persons. Free copies of "Access Travel: Airports" are available from APA-400, Washington, D.C. 20591.

SAFETY (from page 6)

because the average flight stage is 48 minutes for locals and 41 minutes for the commuters. We're comparing one apple with another, and yours doesn't look so good." After outlining steps that the agency has already taken to maintain a stiffer enforcement policy, Bond warned that "such measures will not only continue, but will intensify. I have directed our field division chiefs and safety office managers to use all available resources to insure compliance with Part 135." A principle reason for the two-day safety conference was to examine problems commuter airlines have had in adjusting to the stiffer safety regulations incorporated in the new Part 135, which went into effect last year.

FSS AUTOMATION (from page 6)

by 1995 to keep pace with projected traffic growths. By using the automated system, the agency can meet this growth with no more than the current staff of 5,000 specialists. Following evaluation of the competing designs, the agency will select a contractor to proceed with the initial production phase. FAA has targeted 43 sites for automation, with the possibility that another 18 locations will be added later.

PARIS CALLING

The people who run Orly Airport in Paris want to hire a retired FAA controller for a few months to teach the Orly tower crew how to issue ATC instructions in English. They're even willing to pay someone to do this, but the terms are negotiable. Applicants don't have to know French. This might be helpful, but for the job itself, controller English only is required. For further information, contact Mr. Heurteux, Control Tower, Orly Airport, Division Instruction, Orly Sad 101, 94306, Orly, France.

Quality Control:

The Quality Control Unit is an integral part of the Aircraft and Avionics Maintenance Program at the Aircraft Maintenance Base.

This unit is responsible for maintaining accurate records and administering the "Second Look" at maintenance performed on FAA aircraft and associated systems, in order to assure the highest possible level of safety. The men assigned to this unit in the Aircraft Maintenance or Avionics Specialties have an exceptional background in Aviation as well as their particular specialty. Their expertise has been acquired through years of experience and extensive technical training.

The unit consists of five positions: Two Electronics Quality Inspection Specialists, Two Aerospace Quality Inspection Specialists, and One Unit Chief. The Electronics Inspectors are required to possess a valid FAA Repairman Certificate. The Unit Chief and Aerospace Inspectors must have an Airframe and Powerplant Certificate.

Quality control inspectors prepare the required records and participate in all types of Aircraft Inspections and component changes. They process the completed inspection records, record historical information in permanent records, calculate and maintain time control records, as well as maintaining current inspection and status boards. All inspectors perform incoming inspections on equipment and parts being received. Aeronautical Reliability Reports are initiated by the Quality Control Unit and submitted to the Aeronautical Center for action.

Avionics inspectors inspect and certify all avionics units and associated test equipment after repairs and/or calibration by the avionics unit, to assure the final product meets specified parameters. Test equipment used by the Airway Facilities Division for maintenance and calibration of the FAA Navigational Aids, is repaired and calibrated in the test equipment section of the avionics unit. Avionics inspectors perform final acceptance inspection on these units. They maintain records of all equipment installed on FAA aircraft or in stock, and monitor operation of the avionics unit for compliance with appropriate Federal regulations since it is a certificated FAA repair station.

The maintenance inspectors, in addition to inspecting the work performed by the aircraft maintenance unit, participate in all types of "nondestructive" testing performed on the aircraft; e.g., X-ray, magnaflux, and Zyglo. They have the responsibility for calculating and assuring the accurate weight and balance computations of all assigned aircraft. They are also responsible for the upkeep of all survival equipment, and when necessary initiate special flight authorizations. They inspect aircraft refueling facilities at remote locations to prevent dispensing of contaminate fuel to any FAA aircraft.

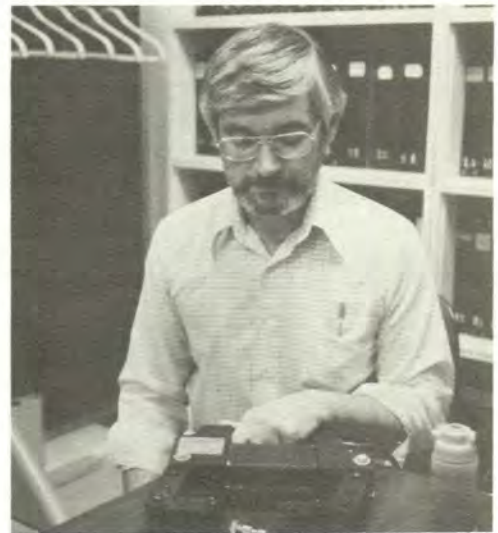
Watchword for Safety

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The Quality Control Unit developed the AAL Supplement to the General Maintenance Manual. The library of technical manuals and regulatory publications was developed and is maintained by this unit. The inspectors constantly provide the technicians and mechanics with assistance in researching information relative to maintaining the aircraft and equipment assigned. The unit participates in all approved modifications (Technical Issuance Engineering Orders, TIEOs), for conformity. When modifications are made to regional aircraft with approval from Washington headquarters, but without FAA engineering input, the Quality Control Unit initiates the appropriate alteration data, and prepares the records for submission to the engineering section at Oklahoma City for inclusion as TIEO.



Paul Rohwer (right) is seen performing the final inspection on a piece of Airway Facilities test equipment calibrated by Del Ham.



Bill Janis conducting non-destructive testing of an engine mount bolt on a Saberliner.



The Quality Control Unit, AMB-2, (from left to right) Thomas J. Kucera, Quality Inspection Specialist, Aerospace; Paul W. Rohwer, Quality Inspection Specialist, Electronics; James Barto, Quality Inspection Specialist, Electronics; Vernon H. Enberg, Unit Chief; William M. Janis, Quality Inspection Specialist, Aerospace.

BAFFLESPEAK AWARD

This week's winner of the Baffle-speak Award, given by INTERCOM to that member of the Federal establishment who has wasted the most ink saying the least, is the National Transportation Safety Board. The Board won in a walk by finding that the cause of an accident was "the failure of the flightcrew to recognize and react in a timely manner to the gross deviation from acceptable approach parameters resulting in a continuation of the descent well below decision height during a precision approach without visual contact with the runway environment." Which is to say that the flightcrew made a bad instrument approach and continued past the decision point even though the runway wasn't in sight.

MONTREAL JOB OPEN

A two-year assignment as an ICAO Language Officer (Translator) is now open in Montreal. A complete command of Russian as the native tongue or the language used for the purpose of education is essential. A working knowledge of French and Spanish would be a valuable additional qualification. The job pays \$23,910, with a tax-free net of \$18,193 for those with dependents and \$16,978 for those without. Applications are due in API-19 by February 18. The API contact is Marilyn R. Fobbs on 202-426-3178.

DC-10 MADE SAFER

The agency has issued an Airworthiness Directive for the McDonnell Douglas DC-10, requiring increased redundancy in the stall-warning system. It also requires installation of a stall-warning "stick shaker" at the co-pilot's position to back-up the one already required at the pilot's position. The AD

is based on a notice of proposed rule-making issued last July and is the latest in a series of actions taken by FAA as a result of the May 1979 DC-10 accident at Chicago O'Hare. The National Transportation Safety Board also recommended such action last month in its final report on the Chicago accident. In that accident, the left engine tore away from the aircraft when the pylon failed. This ruptured hydraulic lines that controlled the leading edge slats on the left wing and cut off both power and sensing information to the single computer that was monitoring the status of the slats. As a result, the pilot did not know that the slats on the left wing had retracted, causing the wing to stall and sending the aircraft into an uncontrollable roll and then into steep dive into the ground. The AD's requirements for a second computer and "stick shaker" are intended to prevent any repetition of this kind of incident.

TOP EXECS MOVE UP

Four more appointments to top FAA management positions have won DOT approval. Warren C. Sharp is the new Associate Administrator for Air Traffic and Airway Facilities, having ended a brief retirement to take the post. Francis E. Whitfield moves from the director's job in the Office of Personnel and Training, to the post of Deputy Director of the Southwest Region. Donald B. Rock steps up a notch to fill the position vacated by Whitfield after serving as the deputy for five years. Gerald L. Thompson has been promoted from chief of the Airway Systems Division in the Airway Facilities Service to deputy director of that service.

Interesting Items from All Over 11

ALERTNESS PINPOINTS STOLEN AIRCRAFT

Alertness on the part of Abelardo Cantu, Galveston FSS, resulted in the recovery of a stolen \$350,000 aircraft in Galveston. When a local pilot telephoned the flight service station, reporting that a Beech Baron had "funny looking" registration numbers painted on its side, Cantu noted that the description of the plane was similar to one on the Look-Out List. Cantu immediately notified law enforcement agencies which later confirmed the craft was stolen. The aircraft is owned by a Dallas oil firm. The altered registration involved the change of one number: N6664Z had become N6864Z.

--Southwest Region Intercom

wake turbulence

Listed below are ten multiple-choice questions which reflect the latest findings by the Federal Aviation Administration (FAA), and the National Aeronautics and Space Administration (NASA), concerning wake turbulence. Check your answers against those at the end of the test. Credit yourself with 10 points per correct answer and if you have a score of 100, you have a high wake turbulence IQ. If your score is less than 70 a little work in the books may be in order. Just because you don't fly into JFK regularly doesn't mean you will never encounter this phenomenon.

- When departing behind a large cargo aircraft, which of the following types of wind would result in the most persistent runway turbulence?
 - Calm winds
 - Direct headwinds
 - 5-knot crosswind component
 - 10-knot crosswind component
- During a calm-winds condition, a jet aircraft departs on Runway 36L. When should a pilot expect the turbulence to reach 36R if the distance between the two runways is 1,000 feet?
 - ½ minute
 - 1 minute
 - 1½ minutes
 - 2 minutes
- When does a departing aircraft start producing wing tip vortices?
 - At the start of the takeoff roll
 - At an approx. speed of 60 knots
 - At liftoff
 - When the nose is first rotated
- What conditions of airspeed, weight, and configuration would generate the greatest amount of wake turbulence?

Airspeed	Weight	Configuration
a. Slow	Heavy	Flaps down
b. Slow	Heavy	Clean
c. Fast	Heavy	Flaps down
d. Fast	Heavy	Clean
- At what rate, and to what altitude will the vortices generated by an aircraft descend?
 - 500 fpm for 900 feet
 - 500 fpm for 500 feet
 - 1,000 fpm for 2,000 feet
 - 1,000 fpm to ground level

- The major danger associated with the high exhaust velocities of large jet aircraft would be present during which type of operation?
 - Landing
 - Takeoff
 - All flight operations
 - Ground operations
- When taking off behind a departing jet aircraft, a good technique would be to:
 - Lift off prior to the point of rotation of the jet and stay above or away from its flight path.
 - Delay liftoff as long as possible to create excessive airspeed for penetration of the vortices.
 - Climb to 500 feet, level off and turn so as to cross the vortex path at a 90-degree angle.
 - Adjust the flight path so as to penetrate the vortex core 500 feet below the generating aircraft.
- Generated vortex cores range in diameter from 25 to 30 feet. How are the two vortices of an aircraft affected by time?
 - The cores rapidly expand until they overlap and dissipate.
 - They stay very close together with little expansion until dissipation.
 - They gradually reduce in size until dissipation.
 - Depending on the atmospheric conditions, they sometimes increase or decrease in size.
- Which of the following tangential velocities would approximate those created by the C-5A or Boeing 747?
 - 500 fpm
 - 5,000 fpm
 - 9,000 fpm
 - 15,000 fpm
- Which of the following encounters with wake turbulence would probably result in the greatest loss of control of the penetrating aircraft?
 - Crossing the wake at a 90-degree angle.
 - Climbing through the wake at a 90-degree angle.
 - Climbing through the wake on the same heading as the generating aircraft.
 - Flights 1,000 feet below the generating aircraft.

ANSWERS TO THE ABOVE QUESTIONS

1.c 2.d 3.c 4.b 5.a 6.d 7.a 8.b 9.c 10.c

The above article is taken from USAF Aerospace Safety.

12 *Completed: Phase 1*

The Alaskan Region recently completed Phase I of the Materiel Support System.

This phase was consummated when our engineers entered project materiel list data into remote terminals of the Four Phase computer. An associated procurement request and its purchase order was then printed by the system.

When completed, the system will provide for up-to-date supply status, vendor performance monitoring, inventory control, project cost accounting and access to this data at any of the strategically located visual display stations at regional headquarters and the Logistics Support Complex.

Monitoring development of the system was a MSS Project Group consisting of Pat Kittrick, Planning/Establishment Branch Chief; Bill Remsen, Procurement Branch Chief; Bill Farquhar, Systems Accountant; Stan Hill, ADP Programmer; and Don Corey, Coordinator.

Some of the people responsible for successful completion of Phase I of the MSS are shown in accompanying photos.



Cliff Roberson, AAL-460



Cheryl DeVries, AAL-55



Jan Meyers, AAL-55, and
Stan Hill, AAL-67.



Nam Cha, AAL-55.

A 'First' for Betty Rogers

13

Betty M. Rogers of the Anchorage General Aviation District Office has chalked up a national "first"--she's the first woman ever to be hired by the FAA as an Aviation Safety Inspector (Airworthiness).

While Betty was attending a training course at Oklahoma City recently, it was officially confirmed by computer that she is indeed the first woman in the nation to be employed by the FAA in that category.

But she hopes she won't be the last.

"I'd like to see other women qualify themselves for positions such as mine," Betty said. "The field is wide open!"

Betty started out with HUD as a clerk back in 1972 but later managed to transfer to FAA, an agency more compatible with her interests.

After working as an administrative assistant, she was able to qualify for her present position which includes certification of flight schools and air taxis, investigating accidents and miscellaneous enforcement activity.

Alaska has been home for Betty since 1970. She and her husband, John, a pilot, flight instructor and rated mechanic, also lived here in 1955 and 1966.

Betty's husband encouraged her to improve her aviation qualifications and pilot skills as well as qualify as an airframe and powerplant mechanic. This expertise paved the way for her current position. The only other woman FAA employee holding a similar position is Lana Basler of Portland, Oregon.

Betty is very active in the 99's, a nationwide organization composed of women flyers. Next month, on Feb. 16, 17 and 18, she and about 20 other members of the organization will take part in an overnight Arctic Survival exercise at Willow. The organization stresses aviation safety and works with the FAA on safety matters.

Through the dedication and hard work of Betty Rogers, other women can now begin to look at aviation careers formerly considered the sole province of men.



The fine points of aircraft maintenance under severe Alaskan conditions have become second nature to Betty Rogers, FAA's first woman Aviation Safety Inspector. (Airworthiness).

GADO-3
Portland-Hillsboro Road
3355 NE Cornell Rd
Hillsboro, OR 97123



COLD AT HAPPY HORSE--Would you believe--120 degrees below zero (including chill factor) at Happy Horse Camp (Deadhorse) recently? "Nothing unusual," says FSS Team Supervisor Doyle B. Riddle, who works on a rotating service basis at Deadhorse FSS. "That's not record cold," says Doyle. "It gets a lot colder." Not only that, Doyle reports, the incessant winds keeps relocating towering snowdrifts that look like Sahara sand dunes, often creating zero visibility conditions. Travelling from Happy Horse Camp where FAAers live to the FSS can be a real ordeal. "With the drifting snow, I had a heck of of a time getting out of the parking lot at Happy Horse the other day, even though I've got four-wheel drive.

* * * * *

DEADHORSE FAA POPULATION: 7---There are only seven or eight FAA employees stationed at Deadhorse on a rotating basis. FSS personnel work on a 21-day schedule--seven days a week, 8 hours a day--before returning to Fairbanks for a rest. AF personnel work longer hours, but are on a one-week rotating schedule.

* * * * *

NIGHTS ARE LONG--Deadhorse nights can be extremely long, any way you look at it. Doyle Riddle reports that on Jan. 18 the sun came up for the first time since November. The darkness, wind, blowing snow, heavy snowdrifts and bone-chilling cold can make life a chore but, as Doyle points out, "We all volunteered, you know."

* * * * *

BUT THOSE MEALS--SOMETHING ELSE--Compensating for the cold, the darkness and the isolation are gourmet meals. Riddle's description of the Deadhorse cuisine is diet-shattering. "Several nights a week there's new york cut steaks and prime ribs. All kind of choices, including seafoods. The meals are tremendous." A contractor at Deadhorse provides room and board (for a fee)--and the accomodations are excellent. For entertainment during off-duty hours, two TV channels are piped in from Anchorage. You can watch a movie on projection TV simply by sliding in a cassette--and there's a good choice of features. There's plenty of books and magazines.

* * * * *

FRIENDS IN THE SKY--"You get to know the 10 or 20 pilots that fly regularly into Prudhoe area," Riddle says. "Everyone's very friendly--and it makes your job a lot easier." So Deadhorse--FAA's oil-spawned outpost in the Arctic--really isn't as tough as most of you would imagine. Ask Doyle Riddle!

* * * * *