National Transportation week is sponsored on a national level during the week of May 14 to 21, 1978, by all modes of transportation including air, highway and rail.

In a real sense, transportation is one of the state's and nation's most important industries. It's an industry that serves all others and thus becomes a significant factor in the daily lives of all Americans.

The air mode in North Dakota alone consists of over 1,600 general aviation aircraft and helicopters. The air mode includes 335 ag aircraft servicing the farmer in North Dakota. The three airlines serving North Dakota in 1977 carried nearly 900,000 departing and inbound passengers from 7 North Dakota airports. Twenty-five air taxi operators in North Dakota carried thousands of passengers in 1977.

Supporting this air activity in North Dakota are 103 general aviation public airports and 7 air carrier airports and the services provided at such facilities.

During National Transportation Week, May 14 to May 21, 1978, the following events are scheduled:

Bismarck -- Sunday, May 14th, Commander Aviation Corp. of Bismarck and Mandan will have a static exhibit of 10 fixed-wing aircraft (both singles and twins) and one Hughes Turbo-powered helicopter on the parking ramp of the Kirkwood Shopping Center - (all day on Sunday).

Bismarck -- During National Transportation Week, fixed base aviation operators on the Bismarck Airport will offer special airplane rides to the public. Participating in this activity at the Bismarck Municipal Airport includes Capital Aviation Corp., Commander Aviation Corp., Executive Air Taxi Corp., and O.K. Aviation Corp.

Mandan --- Mandan Municipal Airport. Commander Aviation will have open house and is sponsoring an air show at the Mandan Airport on both Saturday and Sunday, May 20 and 21. The Mandan Airport will be closed both days from 1 to 3:00 p.m. during the air shows.

Highlighting the air shows on both Saturday and Sunday at the Mandan Airport will be Bob Hoover flying his Shrike Commander, also the flying grandfather and renowned distance flyer -- Max Conrad. He will be there both days. Included is a National Guard Jet fly-over at the Mandan Airport on May 20th, during the air shows. Parachute jumping events are scheduled both days.

Flight Breakfast -- On Sunday, May 21st, Commander Aviation is sponsoring a fly-in flight breakfast from 8 to 12 noon at the Mandan Airport followed by an air show between 1 and 3:00 p.m. Mandan Airport closed during the air show from 1 to 3 p.m.

Devils -- Devils Lake Air Force Dedication of a new runway at 1:00 p.m. Harold Vavra, Director of the Aeronautics Commission, will cut the runway ribbon on behalf of Governor Arthur A. Link.

Devils Lake Airport will have an air show from 1:45 to 4:15 p.m. The airport will be officially closed during the above time frame.

The air activities include aerobatics, National Guard Jet Fly-over, skydivers, airplane novelty act, and radio controlled model planes.

Also on display all day will be National Guard helicopters and other equipment at the Devils Lake Municipal Airport.

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WORK WANTED
Experienced aerial applicator will work last of May and all of June.
Contact: Wally Kraft at Fargo, 235-2643.
GRAND FORKS RADAR APPROACH CONTROL (RAPCON) ATC TALKSHEET

By: Clifford E. Smith, Capt. USAF, Chief, Air Traffic Control Operations.

The purpose of this letter is to acquaint the general aviation community with the services available from the Grand Forks RAPCON, and to discuss some specifics about ATC from our side of the microphone.

The Grand Forks RAPCON is located on Grand Forks Air Force Base, in building 635. For those of you not familiar with the Grand Forks area, the base is approximately 19 miles west of the International Airport. If you intend to visit our facility, you can't miss it; once you're on the base, just look for the Control Tower on the Northwest corner of the base. Just look for it, it's a white building!

The RAPCON is open 24 hours a day, 7 days a week, 365 days a year.

Our mailing address is: Air Traffic Control Operations (FPA), 2152d Communications Squadron, Grand Forks AFB, North Dakota 58205. If you care to chat with someone about anything, the phone number is (701) 594-6539, Monday through Friday, 7:30 a.m. to 4:30 p.m.

The Commander of the 2152d Comm. Sq. is Lt. Col. Robert G. Smith. The Chief of Air Traffic Control Operations is Captain Clifford E. Smith. Master Sergeant Kenneth R. Newham is the Chief Controller. (That is pronounced NEW-N-HAM). There are 5 Crew Chiefs supervising the different shifts in the RAPCON and their average ATC experience is approximately 9 years.

RAPCON AREA: Our area of control responsibility is approximately a 30 mile radius of Grand Forks Air Force Base with extensions to the north to include the Crookston, Minnesota Airport, and northwest to the Brookings, South Dakota Municipal. We control all IFR traffic at or below 7000' MSL, within this area. The Terminal ATC services are offered to the Grand Forks AFB, Grand Forks International Airport, and to Crookston, Minnesota. Radar services are also offered to all VFR traffic within the area, with STAGE II service to the Air Base and Grand Forks International Airport. There will be more on this STAGE II business, later on in this letter. General ATC service is offered to many private and public airports, too numerous to list here.

Now that we've covered that information, let's press on and discuss a few common interest items.

First, as of October 15, 1977, we have started offering STAGE II service to Grand Forks International Airport. Now, before you start squawking MAXIMALLY, we'll attempt to answer your questions about this service.

WHAT IS STAGE II SERVICE? The purpose of STAGE II is to adjust the flow of arriving VFR and IFR aircraft into the traffic pattern in a safe and orderly manner and to provide radar traffic information to departing VFR traffic.

HOW DOES IT WORK? Of arriving VFR aircraft who desire this service should contact Grand Forks Approach Control on 318.1 or 118.1 when approximately 25 miles out. Approach Control will provide the wind and runway information. If the runway is available, you may be allowed to navigate on your own into the traffic pattern or if traffic dictates, you may be given headings to fly to position you behind a preceding aircraft in the approach sequence. When you have that aircraft in sight, you will be directed to follow it. When you are told to contact the Tower, radar service is automatically cancelled.

SEPARATION STANDARDS: Standard radar separation will be provided between aircraft until they are sequenced and the pilot sees the traffic he is to follow. This separation is not provided between VFR or between VFR and IFR aircraft.

TRAFFIC INFORMATION: As in STAGE II, traffic information is provided on a workload permitting basis only. In other words, if the controller has time he will give you traffic advisories. If not, you won't be hearing too much about traffic.

WHO/WHAT IF I DON'T WANT STAGE II SERVICE? For those of you who do not wish to utilize STAGE II SERVICE, simply state on initial contact "NEGATIVE STAGE II". You will then be given STAGE I SERVICE, i.e. WIND, RUNWAY, ALTITUDE, and traffic information, workload permitting. When you are approximately 5 miles from the GKF Airport, you will be instructed to contact GFK Tower for landing clearance, etc.

It is only fair to tell you that when using STAGE II SERVICE the possibility exists that you may receive radar vectors for sequencing and if you take them, you may take you a little bit out of your way. Please don't wait until you receive the vector to tell us that you don't want STAGE II SERVICE. Changing ships in the middle of the stream is not the name of the game.

So far, so good, What's next? Well, let's talk about practice instrument approaches, an everyday occurrence here at Grand Forks.

Practice instrument approaches may be executed either IFR, or VFR. If you are on an IFR flight plan and request an instrument approach, the controller will use the phraseology "Cleared for type approach" and will
ALTIMETER ERROR

A potentially hazardous condition may exist on some models of altimeters. Misplacement of the barometric knob on the barometric setting shaft may allow the barometric setting scale to disengage from the altimeter pointers when forward pressure is applied on the knob to make altimeter corrections. Pilots should observe the following, particularly before IFR flights:

A. Rotation of the barometric pressure setting scale knob results in movement of both the barometric pressure setting scale and the altimeter pointers.
B. Forward pressure on the knob during rotation does not disengage the pressure setting scale from the altimeter pointers.
C. The altimeter indication is in accord with the setting on the barometric pressure setting scale, as referenced to the altitude and current barometric setting at the location of the check.

AIRCRAFT REFUELING PROBLEM - We are receiving reports that Line Service Personnel are causing cracks and separations to occur in the fuel filler necks of various general aviation aircraft. Mechanics, inspecting aircraft, suggest that this failure is caused by fuel servicing personnel failing to support the fuel filler nozzles and hoses when servicing the airplanes. Few people appreciate the load that a fuel nozzle and long fuel hose can exert when permitted to sag or hang in the fuel filler neck. In this configuration the pulsation of the hose or someone stumbling over the hose causes the damage. When using automatic shut-off nozzles, it is common practice to insert the nozzle in the fuel filler neck, turn it on and leave it. The fuel filler neck area was not designed for such abuse.

THE DAUBERS DID IT - Not only birds but insects too can choke off vital airflow in an airplane. After a Cessna 150 in Indiana experienced a forced landing because of apparent fuel exhaustion, although there was fuel in the tanks, it was discovered that mud daubers had completely plugged the fuel vent, stopping the fuel flow to the engine. Fuel vents as well as pitot tubes should be inspected during preflight.

* - GADO #4 Newsletter

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NORTH DAKOTA PROFESSIONAL AVIATION MECHANICS ASSOCIATION ELECTS:

Frank Arzenzano, Grand Forks, has been elected President of the N.D. Professional Aviation Mechanics Association (NDPAMA). He succeeds Gordon Person of Fargo, the association's first president and founder.

Also elected were Dave Carlson, Williston, Vice President; Dave Teets, Rugby, Secretary and John Hanson, Fargo, Treasurer.

The N.D. Professional Aviation Mechanics Association was formed in March, 1977 to improve and update the professional standing of aviation maintenance personnel in North Dakota by sponsoring annual seminars to present the latest in general aviation information and techniques in maintenance of aircraft. This year's seminar was held recently in Bismarck, N.D.

Annual seminars, sponsored by the association, are designed to cover such topics as aircraft maintenance records, engine de-icing and electrical systems and engine trouble shooting.

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CESSNA ANNOUNCES "OPERATION BLUE STREAK" AND NOTIFIES SKYHAWK OWNERS OF ENGINE MODIFICATIONS.

WICHITA, KANSAS -- Citing several significant production changes by Lycoming, in the engine that powers its Model 172 Skyhawk, Cessna Aircraft Company has initiated "Operation Blue Streak" to notify Skyhawk owners of mandatory modifications for the engines in their airplanes.

Affected by the program are all 3,700 Cessna Skyhawks produced in the 1977 and 1978 model years. The engine involved is Lycoming's new O-320-HZAD Blue Streak powerplant, used exclusively in the Skyhawk.

In a service letter to owners and operators of Skyhawks, Cessna said the new engine has accumulated an estimated 500,000 hours of flying time in the two years since its introduction. "The service experience accumulated during this time," Cessna said, "has resulted in production improvements by Lycoming and substantially increases the reliability and service life of the engine."

The changes involve the engine's crankshaft accessory gear, the oil pump and the valve train.

In its letter to Skyhawk owners, Cessna said Operation Blue Streak will accomplish the engine modifications in the shortest possible time at minimum cost or no charge to the owners. Each owner is urged to contact his Cessna dealer immediately to arrange for scheduling of the engine modifications.

Operation Blue Streak is composed of three separate modifications:

*Operation No. 1 -- 287 of the 3,700 Skyhawks affected must have new crankshaft gear assemblies or new engines installed before they are
was a clear answer to cross all the issues that interested the task force.

A clear answer to the task force's questions was reached.

In order to clarify the tasks, the task force met.

**CESSNA Operation White Star**

- was a clear answer to cross all the issues that interested the task force.
- A clear answer to the task force's questions was reached.
- In order to clarify the tasks, the task force met.
## OFFICIAL LIST OF RESTRICTED CHEMICALS:

Aerial applicators who have passed the restricted chemical examination and have need or desire to apply "Restricted Ag Chemicals" are required to go to your County Treasurer of your base of operations and purchase a Restricted Chemical License at a cost of $20.00 by presenting to the County Treasurer proof of your passing the restricted chemical examination. The restricted chemical license, once purchased from your County Treasurer of residence, will be valid in all counties in North Dakota. The following is a list of Restricted Chemicals:

<table>
<thead>
<tr>
<th>PESTICIDE INGREDIENT</th>
<th>CLASSIFICATION</th>
<th>EXAMPLES OF USES</th>
</tr>
</thead>
<tbody>
<tr>
<td>acrolein</td>
<td>All uses restricted.</td>
<td>To control weeds and algae in irrigation canals, pulp and paper mills, cooling towers, sewage plants, other non-domestic bodies of water.</td>
</tr>
<tr>
<td>acrylonitrile</td>
<td>All uses restricted.</td>
<td>Fumigant for stored grain.</td>
</tr>
<tr>
<td>aldicarb</td>
<td>All indoor and outdoor ornamental uses restricted.</td>
<td>Insect, mite, and nematode control on cotton, sugar beets, potatoes, peanuts, other crops, and in commercial greenhouses.</td>
</tr>
<tr>
<td>allyl alcohol</td>
<td>All uses restricted.</td>
<td>Weed killer used in celery and tobacco seed beds and for nursery and ornamental plantings.</td>
</tr>
<tr>
<td>aluminum phosphide</td>
<td>All uses restricted.</td>
<td>Fumigant on grain and tobacco in silos, boxcars, other storage areas.</td>
</tr>
<tr>
<td>azinphos methyl</td>
<td>All liquids with a concentration greater than 13.5%. (Remaining formulations/uses are under further review.)</td>
<td>Insecticide for wide variety of fruits, vegetables, nuts, field crops, ornamental plants, and forest and shade trees.</td>
</tr>
<tr>
<td>calcium cyanide</td>
<td>All uses restricted.</td>
<td>Rodent and ant control in fields and greenhouses; fumigant for empty railroad cars; insecticide for plant nurseries; pest control in mushroom houses.</td>
</tr>
<tr>
<td>demeton</td>
<td>All uses restricted.</td>
<td>Insecticide for various fruits, nuts, vegetables and for outdoor ornamental plants, indoor commercial greenhouses.</td>
</tr>
<tr>
<td>endrin</td>
<td>All uses restricted.</td>
<td>Insecticide for cotton, wheat, other grains; to control pine mite in orchards; seed treatment; bird repellent.</td>
</tr>
<tr>
<td>ethyl parathion</td>
<td>All uses restricted.</td>
<td>Insecticide for cotton, tobacco, sorghum, wheat, fruits, and vegetables and indoor use in commercial greenhouses.</td>
</tr>
<tr>
<td>fluoroacetamide/1081</td>
<td>All uses restricted.</td>
<td>Control of sewer rats.</td>
</tr>
<tr>
<td>hydroxyamphetamine</td>
<td>All uses restricted.</td>
<td>Fumigant for insect and rodent control in farm buildings and warehouses.</td>
</tr>
<tr>
<td>methomyl</td>
<td>All uses restricted except granular formulations, 25% wettable powders, 90% wettable powders in water soluble bags, 1.2% to 2.5% dusts as sole active ingredients, and in mixture with certain other pesticides.</td>
<td>Insect, nematode control on many vegetables, field crops, certain fruits, turf and ornamental plants.</td>
</tr>
<tr>
<td>methyl bromide</td>
<td>Restricted: formulations in containers greater than 1.5 lbs. 6 in smaller containers lacking chloropicrin as an indicator. Unclassified: containers with no more than 1.5 lbs. methyl bromide w/.25% to 2.0% chloropicrin as an indicator.</td>
<td>Fumigant for stored grains; for soil in nurseries, orchards, vineyards and lawns; for crops such as strawberries and tomatoes; for rodent burrows and ant nests.</td>
</tr>
<tr>
<td>methyl parathion</td>
<td>All uses restricted.</td>
<td>Insecticide for cotton, tobacco, peanuts, beans, other crops, and mosquito control.</td>
</tr>
<tr>
<td>mevinphos</td>
<td>All uses restricted.</td>
<td>Insecticide for sewage treatment plants greenhouses.</td>
</tr>
<tr>
<td>parathion</td>
<td>All uses restricted except 1) pressurized sprays containing .44% parathion and 15% petroleum distillates 2) 0.4% and less parathion combined with liquid fertilizer.</td>
<td>Weed and defoliant used on man-made vegetables, grains, range and pasture and weed and grass control around homes and on railroad, utility and rights-of-way areas.</td>
</tr>
<tr>
<td>picloram</td>
<td>All uses restricted except for treating trees by a &quot;cut surface&quot; method with 5.4% picloram.</td>
<td>Weed and brush killer around rights-of-way areas, forests including barley, wheat and range.</td>
</tr>
<tr>
<td>sodium cyanide</td>
<td>All uses restricted.</td>
<td>Coyote control; rodent control in greenhouses; insects in</td>
</tr>
<tr>
<td>sodium fluoroacetate</td>
<td>All uses restricted.</td>
<td>Control of rodents, esp. on ships, at dumps and military establish</td>
</tr>
<tr>
<td>strychnline</td>
<td>All uses restricted except where treated baits, pellets or powder are applied below ground.</td>
<td>Control of rodents, gophers in buildi</td>
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<td>tef</td>
<td>All uses restricted.</td>
<td>Fumigant for co</td>
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<tr>
<td>tef</td>
<td>All uses restricted.</td>
<td>Insecticide fr</td>
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