

Assomblisg hundreds of farmers' queries in a sireable scrapbook, Frank Bill flow them to Weskington. $\mathrm{H}_{0}$ is showe above placing his beggege aboard Scoep IV for the refurn trip. The trip was a sucesss.

NINE years of airplane news coverage and photography by The Daily Pantagraph of Bloomington, It ifnois, have definitely proved that the aerial way is a distinct service, not an adventure-an asset, not a risk.
In all, there have been four planes"Scoops I, II, III and IV"-beginning with an OX-S Waco biplane. Scoop I was purchased in June, 1929, and was christened the following month at a "Central Ilinois Air Derby" at the then 72 -acre Bloomington airport.
With apward of 2,000 hours in the air and approximately 4,000 aerial photographs, The Pantagraph's airplanes have proved their news gathering value time after time. Tbey have taken reporters and photographers over floods, over snowbound countrysides to train wrecks, fires, funcrals of state, and on more peaceful rural photographic missions.
Latest, most imposing service of the Panfagraph airplane was its use in taking Frank Bill, farm editor, and Charles Driver, reporter-photographer, to Washington, D. C. Art Carnahan, who holds a transport rating, is the regular pilot.
Bloomington being in the heart of McLean county-accomnted the third richest agricultural county in the nationthe implications of the AAA were allimportant to The Pantagraph and its preponderance of farmer readers. Interpretations of the AAA were not altogether satisfactory. Mr. Bill, who is also the ace veteran aerial photographer for the publication, spent weeks visiting farmers of the newspaper's territory. He gathered hundreds of pertinent questions pertaining to the AAA. Assembling these queries in a sizeable scrapbook, off he went to the capital to lay them before Secretary of Agriculture Henry Wallace and other AAA officials:
The 700 mile hop was negotiated in Scoop IV, a Stinsce Reliant, with only a stop at Columbers, OAio, for refaeling

> Few American newspapers are as staunchly and continuously air-minded as the Bloomington (III.) Pantagraph. Here is the story of how that enterprising publication uses its airplanes for anything from photography to missionary work to Washington for its many farmer-readers.
and luncheon, both ways. Ground and air cameras, portable typewriters and personal effects were in the baggage compartment. Leaving June 28, the three men returned to the present 164 -acre Municipal airport June 30. Replies to the farmers' queries now are being published for the edification of all interested farmers.

Aside from the hundreds of "good will hops" in which mumicipal and other officials have been taken aloft in the four Scoops, there are many interesting insights on the value of the alirplane. A. T. Anderson, prominent Pontiac, III., landowner, said after a significantly revealing flight, "I wouldn't dream of buying a farm without first viewing it from the
air in order to see the layout, the thin spots, the drainage area, the missing corn fills,"
J. B. Andrews of the University of Illinois agriculture college, discovered that the scope of Canada thistle invasion could be easily detected from the air, whereas it could be learned on the ground cely by word of mouth.
"Crop reporters," said Farm Adviser J. H. Checkley of Logan county, after a countryside aerial tour, "should have airplanes. Then they coald report more accurately."

In all this news flying, Pantagraph ships have never had a mishap. Nearest thing was in one of the old Waco biplanes when

Frank Ball, the Pantegraph's form editor, is shown below discusuing his newspaper's voluminous farm-problems scraphook with Secretary of Agricultere Wallace (right),


# Scoops 

by W. ELDRED RICHARDSON



## Left to right are Pablisher Marwin, Charles <br> Driver, Pilat Carnahan and Frank Bill.

Editor Bill's foot snagged a valve and dumped the gasoline supply, Pilot Carnahan glided to a perfect landing in a wheat field. Fuel was obtained from a farmer's tractor supply and the ship returned to its home port.
Safety is always stressed. There are regalar inspections and adjustments, of course. The photographer directs the flight but the pilot has the authority to refuse to place the ship in unsafe posi-tions-bo matter what the proposed picture may be. An illustration of this was in comnection with the opening of an Illinois river bridge at Pekin in Scoop II, a Waco powered with a Wright Whirltoind J-6 engine. Separate cockpits meant

Both fermers and aviation people are familiar with this sign an Seosp's fuselage.
the use of manual signals from the photographer as to the desired picture positions.

The ship was headed south when the cameraman asked for a low position which would enable him not only to photograph the new bridge but the city's waterfront as well. The pilot refused because, as be explained afterward, the flight direction would have meant a plop in the river in case of engine trouble. Carnahan turned about, heading in the opposite direction and managed the desired 400 foot altitude-but ahead lay a smooth drainage district in which an emergency landing would have been possible.

Scoop I was this old Waco "10" bought in June, 1930, the Pantagraph's Eist ship.

Scoop III, a Stinson Juxior, was nearly "scooped" on the Chicago stock yards fire. Bill and Carmahan had been to the city to get aerial shots of A Century of Prog. ress. Though Scoop III had been delivered unequipped with radio, a set had been installed with a ball-weighted trailing acrial with which they amused themselves en route to Chicago

After they left the Windy City the fire broke out-but they were indifferent to the radio and the aerial was neatly coiled inside the cabin. They heard none of the fire reports until they landed at Bloomington. The ship was hastily refueled and back they sped to get their pictures.
"Obviously," said Bill, "the altitude secured in a plane provides photographe scenes impossible from the ground. The airplane's speed and its ability to go crosscountry without following congested highways make it far more speedy and dependable than automotile travel. The airplane has proved ideal, for instance, to present a picture of a corn husking contest where thousands of spectators and contestants are scattered over a wide ares.

This pholegraph wat taken by a Pantagraph plane and is of one of the Illinois forma photographed in that paper's bighly popular contest.

Another Sooop identity seatest picture was this one of Chatamarth, III. Pantagraph readerz guesied it sasily.



News coverage is an important function of the Pantagroph's Seopss, Below is an assignmest covared-a tornedo that nearly wiped out South Pakin III., early this year.
"We were able to get a pictare of all of Lake Bloomington on one film. Other views have shown the Alton railroad shops in their entirety; or the entire length of the McLean coanty centennial celebration parade-even though it covered a distance of 22 blocks.
"On many occasions, Scoop pictures have graphically depicted widespread flood conditions in different parts of Illi-nols-views that showed highways and railroads wasbed out, bridges missing. livestock standing or swimming to high points-views, in short, that would have been impossible from the groand, or from a boat, when the vital time element of newspaper publishing is considered."

Everyone in central Illinois knows the familiar orange and black Scoop. Approximately 1,200 pictures of outstanding farms have been published with rewards offered for their identification. More than 1,000 of these have been identified by owners who thereapon received framed and suitably inscribed original photographs. A good will gesture? Certainly, but also a service to the farmer showing him those glaring errors of land or layout that are not readily perceived from the ground.

Bill's aerial experiences have led him into the field of target bombing. Harm-
less bombs, to be sure-copies "hot off the press" containing World Series or other extras. Bundles of newspapers, tightly wired in corrugated wrappings are methodically dropped off at 20 towns in Bloomington's area which would otherwise receive no detailed account of these events until the next day.
Here is the way the delivery $\log$, as worked up by the circulation department and handed Bill, reads:
"Heyworth-west and south of high ,chool, southwest of town, one block west of State Route 2. Clinton-east of town, in ball park. Weldon-southeast part of town, south of Illinois Central railroad, in pasture," and so on. Local agents are on hand to snatch up the "bombs"; break them open and deliver them.

In the winter of 1930 , there was $u$ serious train wreck at Forrest, nearly 50 miles from Bloomington by air and considerably farther by road-if the roads could have been ased. There had been a blizzard the night before and all highways were effectually blocked by drifts. Open fields in most cases had been swept bare by the gale. On this chance, the flight was made. Even though a landing were impossible, air shots could be taken
(Continued on page 78)


Another example of Pentagraph eir-mindedsess is the annual Castral Illinais Air Derby spansored by the papar. Above is a typleal erowd that attended a recent derby.

## Know Your Markings?

THE following table will-we hopeput a stop to the handreds of letters that come into these offices asking where such-and-such an airplane is from or what those big block letters on the fuselage and wings mean. With the exception of the United States, the commercial airplanes of the countries of the world are identified solely by a series of letters. Only letters used as international identification for American aircraft is "N", The following table gives a complete list of all international aircraft markings.

Example: CF-XYZ is a Canadian: PH-XYZ is from Holland; ZK-XYZ. New Zealand, etc.

| CC | Chite |
| :---: | :---: |
| CF | Canada |
| CL or CM | Cuba |
| CN | Morocto |
| CP | Bolivia |
| CR | Portuguese colonies |
| CS | Portagal |
| CX | Uruguay |
| C2 | Monaco |
| D | Germany |
| EC | Spain |
| E] | Ireland |
| EL | Liberia |
| ES | Esthonia |
| E. 2 | Saar |
| F | France and colonies |
| G | Great Britain |
| HA | Hungary |
| HC | Ecuador |
| HB | Switzerland |
| HH | Haiti |
| H) | Dominican Republic |
| H) | Columbia |
| HR | Honduran Republic |
| HS | Stam |
| 1 | [taly and colonies |
| J | Japan |
| LN | Norway |
| L. 7 | Bulgaria |
| N | United States of America |
| OB | Peru |
| OE | Austria |
| OH | Finland |
| OK | Czechoslovakia |
| OO | Belgium |
| OY | Denmark |
| PH | Holland |
| PJ | Curacao |
| PP | Brazil |
| P2 | Surinam (Netherlands West Indies) |
| PK | Netherlands East Indies |
| RV | Persia |
| RX | Panama |
| RY | Lithnania |
| SE | Sweden |
| SP | Poland |
| SU | Egypt |
| SX | Greece |
| TC | Turkey |
| T ${ }^{\text {P }}$ | Iceland |
| TG | Guatamala |
| T1 | Costa Rica |
| U1. | Luxemboury |
| URSS | Russia |
| VH | Asstratiad materia ed on tage 89 |



## What Is Science Fiction?

It is the reality of the future, manifested In the dreams of the prewent, All mreat inventions were foreshadowed by fetion. Juiek Verne wrote "Twenty Thoakand Leagues Under The Bea" and created a aubunitine in ©ction. Today that mubmarine is an actuality, and amaxingly falthful is is an actashity, detall to Verne's vesinel. The dresims of today are tomorrow'※ reantion. If you belleve in man's future, then why not read the marazime of sclence fictlon ? Read of the loglieal isventions of the futare sas imagined by the top writers of today. the writers with vislon, presented in an entertaining makner in atory form, in

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Flying Scoops<br>(Continued from page 42)

## Gas Model <br> (Continued from page 6.3)

of the piled up cars and locomotive. But luck was with the airmen. They found a suitable field within 200 feet of the wreck and landed in only five inches of snow.

Bill not only got his aerial views, but intimate groand pictures as well. He was far too pleased over the happy combination to complain about floundering through drifts up to his armpits.

The name "Scoop" is intended as it would seem to be defined. It means that $T$ he Ponfagraph usually has the jump on all its central Illinois competitors because it alone operates an airplane. The mame was selected in a contest in which 1,200 saggested designations were submitted.
Scoop II also was Blown to victory in the 1929 Natiomal Air Races by John Livingston of Aurora. To Davis Merwin, former publisher of The Panfagroph, goes the credit for not only promoting aviation's interests in central Illinois, but for making that section of the state "zir-minded" back in 1929. A pilot himself, be was among the first to discern the enormons advantages to "spot" bews coverage through utilizing the airplane. Then, when it was found that the propeller blast interfered sctiously with the operaticn of ordinary newspaper cameras, a special aerial camera was purchased in 1930.

Good pictures had been obtained before that, though, for Scoop I, the first Waco laurried aloft to the distinction of meeting the Graf Zeppeling on its world flight and enabled $P$ ontagraph readers to sec pictures of the airship in actual flight over Illinois.
When the origimal Bloomington airport north of the city-a 72 acre tract-became obsolete in 1932 because of its size, businessmen of the city contributed $\$ 25,000$ with which to purchase the present 164 acre municipal field east of the city on State Route 9. It was a non-speculative plan of making the land available to the city under lease with option to purchase. The city subsequently leased the port and is in charge of its operation.
builder as being an unworthy piece of construction. In covering the fuselage it is best to cover it in long narrow strips from front to rear. Smooth down any roagh edges with dope used in attaching bamboo paper to framework. Incidentally, dope used for attaching the paper is ordinarily model airplane cement cut with about 25 per cent 30 per cent thinner. Covering the wings is a much simpler job than the body, but make sure that the paper is cemented to every rib on the under surface so as to keep the curved sc-tion when paper is shrunk. The paper on the top side of wing panel may be only fastened to every foarth rib or so. When applying the water to the paper parts, make sure they are held securely in position by means of blocks to prevent them from warping out of shape. After all these parts have become thoroughly dry, two or three coats of model airplane dope are given them with a light sanding before each coat. The colors are next applied.

Before making the flying test, check the model for alignment and for the security of the various parth. Tighten all parts that may have been loosened by the shrinkage of the covering and check propeller fastenings.

Testing and Flying the Model
This should be done preferably over tall grass or weeds so as to prevent any injury to the model. Adjust batteries so that when model is beld by fingers from either wing tip one-third of the way back from leading edge, it will balance with the nose pointing down about one or two degrees. Next launch the model from the hands into the tall grass or weeds so that you may determine whether it glides to the ground without stalling or diving. If either of the two should oceur, move the battery on the rack to correct for 3 it . When testing the model under power, the throttle should not be completely opened until you are thoroughly familiar with the ship's behavior. A few trial Alights will acquaint you with its different maneuverg,

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