

FLIGHT STATISTICS

Formation Take-Off Accident:- A division of F4F-4's, in overload condition, was making a formation take-off with a wind approximately 6 knots broad on the port bow. One airplane swerved approximately 60 degrees to the left during the take-off run. The pilot maintained full power and attempted to continue his take-off. He became airborne near the edge of the field, but crashed into obstructions which resulted in fatal injuries.

BUREAU COMMENT:- Current instructions fully explain the marginal rudder control of this airplane for take-offs with wind on the port bow. Formation take-offs with full overload under these adverse conditions appear unwarranted. Rudder modifications to eliminate this condition are now under test.

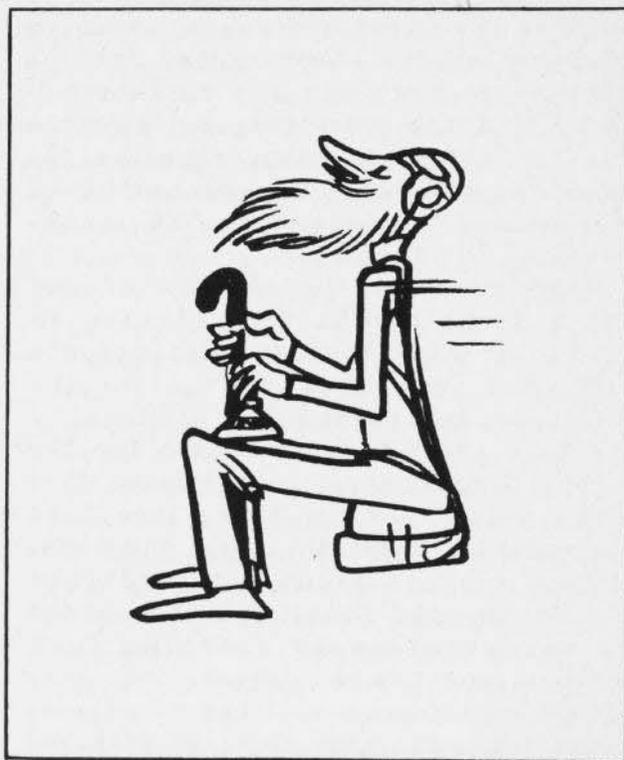
The pilot in this case made a serious error in judgment in attempting to continue take-off after encountering difficulties which made a successful take-off doubtful. This type of pilot error was recently reported on under the heading "The Lesser of Two Evils".

Forced Landings At Sea:- During a recent 18-month period 45 forced landings at sea, (British, "ditching") have been reported for carrier based aircraft. Landings reported in this category include only pilot-controlled landings made at sea, due to engine failure, gas shortage, etc.

There are several points of interest which appear in connection with these forced landings:

(a) Fatalities occurred in only two of these 45 landings; one an F4F-4 and the other an SBD-2. The F4F hit a swell, head-on and the SBD was reported as having made an exceptionally hard landing. Personnel were believed to have been knocked unconscious upon impact, in each case.

(b) Very few serious injuries were reported. Many reports indicated "no injuries". Most of the injuries



With Comments by GRAMPAW PETTIBONE

reported were minor head and face injuries. These should be largely eliminated by the use of the lap and shoulder type safety belt. The use of this safety belt might even have prevented the two fatal accidents referred to above.

(c) The time aircraft remained afloat varied considerably, but with the exception of the two fatal accidents previously noted, it was sufficient in each case for pilots to get clear and into their life rafts.

Understand Your Fuel Consumption Curves:- A student pilot undergoing operational training recently made a crash landing in an SB2A-4 when his engine suddenly failed approximately one hour after take-off. The pilot escaped without injury but the airplane received major damage.

It was the opinion of the Trouble

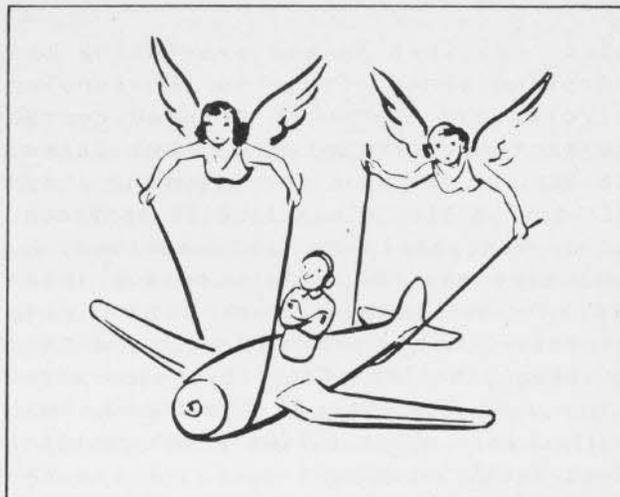
Board that the engine failure resulted from depletion of fuel from the left main tank which was found dry, and that the pilot had failed to shift to either of the other tanks, both of which were full. It was further believed that the underlying cause of the pilot's failure to take proper action was due to his lack of understanding of engineering fundamentals, as illustrated by the following:

Shortly after the receipt of the SB2A-4 airplanes at this station an instructor flew a student pilot on a flight for area check-out. After the flight he instructed the student to ascertain the fuel consumption for the flight. The student reported later that it was 56 gallons per hour, then told the remaining students of his findings.

When subject pilot returned from this crash, the first question asked him was relative to shifting fuel suction, to which he replied, "No, sir, I didn't shift because I had 87 gallons in the left main tank to start with and the plane only uses 56 gallons per hour. Since I knew I had plenty of fuel left, I didn't shift." It was determined that this pilot was averaging considerably more power than the instructor previously mentioned.

There were no fuel consumption curves on the SB2A-4 airplanes available at this station at the time this student commenced his familiarization; however, it was assumed that all students had enough of an engineering background to realize that fuel consumption varies with the power used. Fuel consumption curves have now been received at this station and are being fully explained to students before flight.

Grandpaw Pettibone says:- This accident gives me a chance to sound off on a point I've been wanting to mention for a long time; the question of hangar and bunk flying. There is probably more misinformation passed out during an average bull session of partially trained pilots than in any other group discussion in the world. Mark you, I'm not against these sessions, in



fact I think they are one of the finest things in aviation; they indicate an interest and enthusiasm for flying and much valuable information is picked up in this manner -- BUT . . .

Much of this good is offset by the incorrect and incomplete dope which is so freely given. It's a case of a little knowledge (about airplanes) being a dangerous thing. The good things you learn will help you, but acting on one wrong bit of advice may be fatal. Look at the above example: one guy says, "These SB2A's burn 56 gallons an hour; my instructor and I checked it this morning." This happens to be true, but is very incomplete. Some student takes this as the whole truth, flies accordingly and, as a result, almost kills himself.

Do you get the point? Sure, continue these bull fests, but be careful; careful in what you say -- your roommate may try out your theory and bump himself off -- and careful in what you believe -- don't put your roommate's half-baked ideas into practice without first checking them with your instructor. Your roommate will be sad and lonely when you are gone.

BUREAU COMMENT:- See article in last News Letter, "Let's Get Fuel Conscious".



Collision Danger During Night Landing Practice:- Case 1. The student pilot of an N2S-3, during night landing prac-

tice, saw that he was overtaking the airplane ahead of him in the landing circle. He thereupon changed course to increase the interval, but failed to keep his eye on the airplane ahead of him. While on his landing approach, at approximately 30 feet altitude, he suddenly saw the same airplane ahead of him again and on a converging course. In his attempt to avoid this airplane, he inadvertently snap-rolled his own airplane and struck the mat with power on, in an inverted position. Remarkably enough, this pilot was not killed.

Case 2. During primary night flying there were eight solo students in the landing circle around a well-lighted field. The traffic pattern gradually became elongated at the down-wind side of the runway, until the students were making long, flat, transport-like approaches. One student temporarily lost sight of the plane ahead of him and after commencing what he considered a normal approach, collided with the plane preceding him, which, in following the other traffic, had been forced to make a long approach. As a result of this collision, one pilot was killed when his airplane crashed, out of control.

BUREAU COMMENT:- Pre-flight lectures to students should emphasize, stress and accentuate the absolute necessity for maintaining sight contact, at least on the airplane next ahead in the landing circle.

A poor traffic pattern is also considered to have been contributory to the collision in case #2. Planes should not get bunched at the landing end of the circle; this results in the traffic pattern here noted. Planes should be fairly evenly spaced and if more distance is needed, it should be taken on the upwind side of the circle.

The following letter was recently received from Fleet Air Wing Five:

"Dear Grampaw Pettibone:

"In the days of one hour endurance

flights, within sight of the pasture and salvage facilities, Chapter 60 of the Civil Air Regulations, PX's, etc., must have been unknown. However, such things must have appeared on the visionary screen of those far-seeing pioneers.

"Recently the pilot of a flying machine took off after a respectable lunch, for a destination in excess of three hundred miles. Expert navigation enabled him to arrive twenty-six minutes ahead of the predicted ETA. The pilot "walked away" and filed a PX. No arrival report came in and the operator could not go to dinner until his board was cleared. Things then started happening. ATC released a ZZZ message, all communication personnel were aroused from their normal complacency. Ensigns were recalled from cocktail rooms, lieutenants junior grade were taken from their courtships, lieutenants from their card games, lieutenant commanders



from their after-dinner naps, and commanders from their study of the "broader aspects". The state police of three states and coastal aircraft spotters were notified, the latter asserting that no such aircraft had penetrated. The telephone lines were buzzing; the destination was called by long distance only to declare that the plane had not arrived and to inform the caller that a physical check up had been made.

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"A coordinated search was planned involving aircraft at three different localities. Density of search, character of terrain, endurance and number of searchers to be lost were all considered. Invaluable training was conducted between 0200 and the dawn.

"Unfortunately when one of the searchers was briefed for his mission, he let the cat out of the bag by asserting he had seen the lost plane and pilot arrive at his destination. Another physical check disclosed that such was the case. Then telephone lines started buzzing again. This time they were carrying messages calling off the search and putting the flyers and flying machines back to work combating the submarine menace.

"Please tell us, Grampaw Pettibone, does this appear as the work of gremlins and if so, what type are they? The job definitely is of the white collar variety, but since when have they invaded the field of communications? All other research points to flyers as being the only form of life capable of being confused by their tactics."

/s/ (Name withheld)."

Grampaw's Reply -

'Tain't gremlins!

Guess I'm just old-fashioned, but I don't believe in "them". I'm firmly convinced that all these reports about gremlins botching the works are only the symptoms of a modern, aviation disease - gremlinitis.

When aviation personnel contract this disease, they begin dopping off and doing slipshod work - then when something goes wrong, they immediately start yelling, "The gremlins did it!" I'll bet a planter's punch against an ice cream soda (make mine strawberry) that if you backtrack this present case carefully you can put your finger right on the "gremlin" in the woodpile. Somebody failed to file or send a report properly, or maybe the station of destination had a lax system of logging flights.

This is a very dangerous disease because it is so contagious. If strong

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purgatives are not administered in the initial stages, the entire squadron or ship will be infected in a short time. The best prophylaxis against the gremlinitis germ is to wear a bag of asafoetida around your neck, or carry a rabbit's foot or other charm in your pocket; and then work like hell to do your job thoroughly and correctly.

Other interest points in your letter: (a) You say, "Expert navigation enabled the pilot to arrive 26 minutes ahead of predicted ETA." Strikes me as being a right poor estimation on time of arrival, or maybe he allowed himself 26 minutes for the gremlins getting him lost and when this didn't happen, he got there early, (b) Maybe the "invaluable training" derived from this episode made it worthwhile, after all, and (c) Your expert diagnosis of where to locate your officers in an emergency was very enlightening and should be noted by other squadrons.

/s/ P. S. Pettibone.

The following summary of aircraft accidents which have occurred at NAS Fort Lauderdale were submitted by that station for publication, in the hope that it would cause other pilots to THINK:

Oct. 24, 1942 - Pilot ran out of gas on one tank on familiarization flight. Made forced landing in rough field before he could shift and pick up suction on full tank. Airplane required major overhaul.

Trouble Board Finding: 100% Pilot Error.

Oct. 25, 1942 - Pilot dipped wing in water and knocked off wing tip making torpedo run. "Altimeter read 125'", pilot stated, when this occurred. YOU CAN NOT DEPEND ON THE ALTIMETER WHEN CLOSE TO THE SURFACE.

I DIDN'T KNOW IT
WAS LOADED



A very lucky pilot survives this accident.

Oct. 20, 1942 - Pilot attempted to break all records for speed in a dive after altitude flight. He exceeded the restricted speed (315 kts. in light condition) and the wing disintegrated in the dive, resulting in fatal dive and spin into the ground. Pilot was instantly *killed*.

Result - one pilot who will never drop a "fish" or bomb on the Japs, and one plane completely demolished.

Trouble Board Finding: *100% Pilot Error.*

Nov. 9, 1942 - Pilot put head into cockpit to check fuel before night landing and flew into trees on edge of field. Plane caught on fire and was completely demolished. Pilot *luckily* escaped with first and second degree burns on head and arms.

Trouble Board Finding: *100% Pilot Error*

Nov. 10, 1942 - Pilot pulled "wheel handle" instead of "flap handle" after landing. Another plane out of commission for ten days.

Nov. 21, 1942 - Pilot attempted to land too close behind plane ahead, and was flying too close to stalling speed of plane. As a result, he struck the slipstream of plane ahead and "spun in" on the end of the runway. The airplane was completely demolished; pilot received minor cuts on face.

Trouble Board Finding: *100% Pilot Error.*

Nov. 23, 1942 - Pilot was number two of three plane section. On cross under to right echelon he got too close beneath number three and ahead. In attempting to get clear, pilot pushed over, thereby striking the underside of number three with his tail. The tail was chopped off by number three's propeller and plane crashed into sea. Pilot bailed out; rear man went in with plane. Neither plane or body recovered.

Trouble Board Finding: *100% Pilot Error. Pilot Dropped from Operational Training.*

I DIDN'T KNOW IT WAS LOADED



Nov. 25, 1942 - Pilot ran out of gas on one tank with *two full* tanks, while making touch-and-go landings. Fortunately for him, this occurred just after a landing. However, pilot nosed plane up by applying too much brake, resulting in one plane requiring a new engine and propeller.

Dec. 28, 1942 - Pilot raised flaps too soon after take off. He was approximately fifty feet in the air and probably had not over 80 kts. air-speed. Plane squashed and spun into ground and immediately caught on fire. Pilot was removed from wreckage in an unconscious condition and died two hours later. THIS PILOT MIGHT HAVE SAVED HIS LIFE HAD HE HAD HIS SHOULDER SAFETY BELT ATTACHED. Plane was complete loss.

Trouble Board Findings: *100% Pilot Error.*

Jan. 1 and 2, 1943 - Two more pilots tried to fly on an empty gas tank while they had two full ones. Result: one plane lost at sea, and one plane completely washed out due to forced landing.

THEY WON'T FLY WITHOUT GAS.

Trouble Board Finding: *100% Pilot Error.*

500,000 Airplane Models

More than half a million airplane models have been distributed to Navy and Army recognition classes, where they are of incalculable value in training pilots and gunners, and this number is being increased by thousands, each week, according to the Special Devices Section, Training Division. The distribution of these models is world-wide.