

GRAMPAW PETTIBONE

Grampaw Pettibone says:

Just take a look at the figures in the Accident Rate Table at the bottom of the page and you'll see why I'm smiling for a change. In the last three years there has been a steady decline in the number of serious and fatal aircraft accidents. In 1947 and 1948 where the number of hours flown was pretty nearly the same, there was a big reduction in the number of persons killed in naval aviation accidents. Even so, there were 1558 major accidents in fiscal 1948 or an average of about 4 per day. There is still plenty of room for improvement.

As we go to press the records show that we are doing better in the first six months of fiscal 1949. With only two days left to go on this period ending December 31st, there have been 54 fatal accidents in which a total of 112 lives were lost. This represents about a 20% improvement over the corresponding period last year.

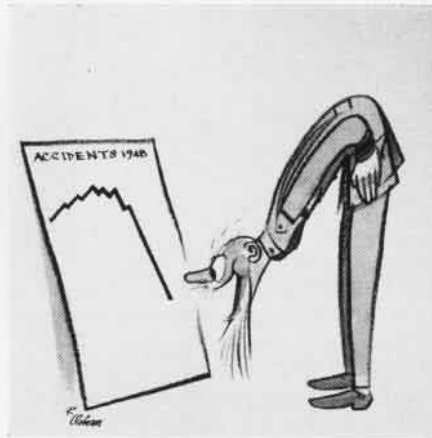
Let's all put out some real thought and effort and see if we can't make 1949 the safest year on record.

This Month's Rough Ride

I've been on a few rough rides in my day and heard about some that were a lot worse, but here's a story that's hard to tie. The plane was a PB4Y-2 piloted by an Ensign on an instrument flight plan to Mobile, Alabama. We pick up the pilot's statement just after he starts to comply with instructions to "proceed to the north west leg and hold, etc."

"I told them I was starting my climb and would proceed as instructed to 2500 feet and hold on the northwest leg.

"At approximately 1600 feet I lost contact with the ground and at approximately 2000 feet I encountered severe turbulence and an updraft that took us to 4000 feet. With conditions prevailing as they were, I called



the approach controller and told them I was encountering such turbulence that I was not going to try an approach at Mobile and requested clearance back to Montgomery. The controller contacted ATC and advised me I was cleared to Montgomery airport, (Maxwell Field), to climb to and maintain 500 feet on top. They further advised me to continue my climb on the northwest leg and to call when at my altitude of 500 feet on top. At 9500 feet, I contacted the controller again and advised them of my altitude and that I was still climbing. At this point after being on a heading of approximately 305 degrees on the northwest leg, I was cleared to proceed on my base course to Montgomery and to continue my climb to 500 feet on top.

"I do not remember just how long it was after that, but I had turned to my approximate base course of 060 degrees and had climbed to 12,000 feet when we encountered severe turbulence. Our next indication of any up or down drafts was experienced when we were dropped from 12,000 feet down to 6000 feet, while still in a climbing attitude and back up to 13,500 feet in a matter of a very few seconds. Series of very violent drafts continued in rapid succession, so fast that I had no idea what

corrective measure to use to bring the plane to a normal attitude.

"My gyro horizon was tumbled on the first series of up and down drafts and I was left with only the basic instruments of needle-ball altimeter and airspeed to know my attitude. They were all moving so rapidly that it was difficult to determine in just what direction the plane was moving. In a nose high attitude with forward pressure applied on the elevator control, our altitude seemed to go up, gaining speeds which were unreadable at a glance. During the early period of the severe turbulence, a definite "stalled" shudder was noticed and immediately I noticed the ball go out to the left about one-quarter inch and also a definite loss of control of the elevators; in fact it was such that I was in question as to whether I had any elevators at all.

"My first attitude was nose down just after the shudder, which lasted only momentarily. I had lost all ICS communication, therefore was at a loss to relay any information to anyone in the plane. I was later informed that no one had a headset on due to being tossed around so much. A bail-out order during this experience would have been suicide. At no time did I ever give up as having lost the battle for life which was existing.

"During one of the violent drafts, just after the loss of the elevator at approximately 6000 feet, and in a nose down attitude, we reached approximately 3000 feet before I could feel any elevator pressures at all.

"Immediately following this recovery I was holding forward pressure on the elevator control which continued to become greater, being followed by a pressure on my back against the seat and later being suspended by my safety belt. Also, when I pulled back on the elevator control after finding it impossible to recover by forward pressure, I experienced an excess speed noise and a very hard seat pressure on the pull out.

AIRCRAFT ACCIDENTS IN STEADY DECLINE BUT THERE'S PLENTY OF ROOM FOR IMPROVEMENT!

Now
WATCH
OUT FOR
OVER
CONFIDENCE!



	Fiscal Year 1946*	Fiscal Year 1947	Fiscal Year 1948
Major Damage Accidents (a) -----	5,031	1,979	1,558
Fatal Accidents -----	537	181	144
Fatalities -----	1,067	332	246
Fatal Accident Rate per 10,000 hours (b) -----	.82	.73	.62
Number of pilots killed per 1000 exposed per year----	14.19	9.04	7.78
Aircraft Hours Flown -----	6,559,232	2,485,130	2,312,064

*Fiscal 1946 includes the last two months of the war, but the figures given above do not include combat accidents and combat fatalities. Nevertheless more than half the major damage accidents during 1946 occurred during July-August-September quarter.

(a) Major damage accidents include Class A, B, and C damage, i.e. strikes, major overhauls, or replacement of major assemblies such as wings, empennage, engines.

(b) The rate for pilots killed per 1,000 a year is computed for pilots on active duty. The corresponding rate for pilots participating in the Naval Air Reserve Program is about half as great.

"This maneuver, a half, if not a complete loop, is verified by later statements of the crew and passengers aboard. Everyone reported being on the overhead of the fuselage and witnessed gear falling from the deck of the plane to the overhead where they were thrown by the inverted position. Chief _____ volunteered information that he was pinned between the forward crown turret and the port side of the overhead and witnessed all of the loose gear stowed in the plane captain's jump seat fall to the overhead of the plane. The men in the after station were sitting on the heater pipe located in the overhead of the after station.

"Dents, approximately 12 inches in length, are present to verify that statement. Loose gear was tossed in every direction about the plane. It has been noticed that a number two can of peaches came to rest in the dome of the forward crown turret on the flight deck. An inverted position was necessary for that to happen, and to substantiate the statements made by the crew and passengers on board.

"It was due only to the terrific updrafts present that we were able to recover from the inverted position. I am certain we were swept upward while being inverted as our altitude was indicating around 7000 feet at the point of recovery.

"After gaining a level attitude and erecting my gyro horizon three or four times I started my fight to get down under the storm. On two occasions when at approximately 3000 feet, on the let down we were swept back up to around 6500 feet. The altimeter hardly ever stopped and it was only due to a very dependable radio altimeter that I was able to estimate my altitude below 4000 feet.

"At approximately 1615, local time, and at an altitude of 200 feet I was clear of the overcast. I turned to a course of 090 degrees and immediately asked Chief _____ to give me a gas check. Due to the gyrations and unusual attitudes just experienced every reason was present to believe that we might have lost most of our gas load. Chief _____ reported that the sight gauges read approximately 35 gallons on each tank, but that bubbles were flowing in the sight gauges so much that he could not be sure the reading was correct.

"I was the only one in the plane aware of the fact that we had only one elevator. I was experiencing a very difficult time in maintaining altitude due to the porpoising effect of the lone elevator. After flying approximately five to ten minutes on the easterly heading, Midshipman _____ spotted Ellyson Field on our starboard side about one mile distant. The visibility at that time was estimated to be about one and one-half miles, with the ceiling slightly over 200 feet. A very dark area was prevailing in the direction of Pensacola with visibility to the east and north of Ellyson such that we could not determine weather in those areas. Number four engine was cutting out intermittently, therefore it was my decision to set the plane down.

"A normal landing was made; however, due to the extra speed necessary to control the elevator we were fast on the approach, going over the end of the runway at approximately 115-120 knots. Impact was made

at approximately 105-110 knots with brakes being applied immediately. However, due to the short runway, we were unable to bring the plane to a stop. When I saw that we would not make it, I applied full power on the port outboard engine with intentions of ground looping the plane to the starboard. After leaving the runway to the right, the port main landing gear collapsed and the plane came to a stop just inside the fence on the north end of runway 36. All passengers and crew members were on top of the plane by the time I got out of the plane through the cockpit hatch.

"The plane was a strike, but I was very relieved to see that every man was going about on his own and that no one was injured other than a few minor cuts and bruises, which were all sustained in flight."

"I cannot say that everyone in the plane was calm; they had little time to be that way . . . but everyone was doing his utmost to carry on during a very serious situation. I wish to express my appreciation to every man involved for his support during this incident."

Life Is Brief Sans Briefing

A pilot of the F4U-4B shown in the accompanying photo was the division leader of a four-plane night cross-country flight, which included a five minute stop at NAAS MIRAMAR. On this landing he broke off and made a normal approach to what he thought was runway 28. His vision of the runway was obstructed to an appreciable extent because of thin scattered clouds at 800 feet and ground fog in the gully through which ran two rows of high intensity approach lights. These red lights extended back from the head of runway 28 for a distance of 2000 feet and are the same width as the runway.

The aircraft made contact with the ground in a normal landing attitude approximately 400 feet short of the runway. The wheels were broken off by the initial impact which was with the top portion of a six-foot embankment. The plane then bounced forward 72 feet at which time the propeller began digging in. About 44 feet further the propeller left the aircraft and the landing gear strut stubs began digging in. This flipped the Corsair into the air and over on its back for a 40-foot slide.

The Accident Board states that the pilot mistook the two rows of red lights for the service runway. He had only a



brief vision of the entire field before pulling up the plane's nose into a landing attitude. This accounted for his not seeing the green lights across the end of the service runway. The ground fog in the gully dimmed the intensity of the red lights to such an extent that the pilot failed to recognize their true color.

Interrogation of other pilots on the same flight disclosed that they experienced the same confusion regarding the true limits of the runway, and could have suffered similar mishaps had they been allowed to make their approaches. The Board also notes that this pilot was making his first night landing at this field and was not briefed regarding the additional lighting facilities. He had, however, made a daylight landing at this field a week previously.



Grampaw Pettibone says:

I agree wholeheartedly with the opinion of the Board in this case. The one gratifying feature about this accident was the fact that the pilot escaped with his life. Lucky, I would say.

Don't be overconfident about landing at a field at night, merely because you've been there once in the daytime. Things have a way of looking a lot different at night, especially when you throw in a little fog, smoke, or haze. Avoid confusion by insisting on a THOROUGH BRIEFING.

Get the Shovel

The pilot of an FG-1 stalled out a little high while landing under calm wind conditions (2 knot, 40° crosswind). His left wing dropped and he apparently hit the slipstream of the plane ahead just as he touched down. He applied left brake and right aileron and reported, "This procedure seemed to be effecting recovery." However, the airplane, not understanding what was expected of it, dutifully turned left upon application of left brake and headed for the sticks. One of the photographs which accompanied the accident report, shows that both brakes were on as the plane left the runway. As a result, the Corsair flipped over on its back and suffered strike damage.



Grampaw Pettibone says:

They really had to break out the shovels to dig this lad out. Fortunately, he got out of this scrape with nothing worse than a broken arm.

Remember, when the winds are light and variable it is a good idea to allow yourself some extra interval on the plane ahead. This chap got into trouble by (1) landing a little too close to the aircraft ahead, (2) trying to land his plane about 10 feet too high, (3) improper use of brakes.

It takes fast headwork to get off the brakes when you have almost effected a recovery from a bad swerve and see that you are going off the runway into soft dirt; but if you don't do it, you are almost sure to end up on your back. That is not good.