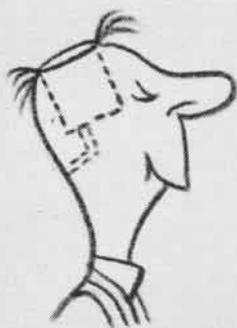


GRAMPAW PETTIBONE



HE FEELS NO PAIN!
HE IS NOT CONSCIOUS
OF HIS CONDITION!

Bailing Out Problems

During test flight of an F4F-4, the stick jammed in the full forward position (cause undetermined), forcing the pilot (397 hours) to bail out. The following remarks from the pilot's statement are quoted as a reminder that bailing out, while not requiring actual practice, does merit some thinking ahead to enable you to meet the problems you may be up against:

"The cockpit enclosure jammed about two-thirds open as I tried to get out; however, I was able to get out without using the emergency releases. I was clear of the plane at approximately 5,000 feet.

"For information concerning my actually getting free of the cockpit, which might be of value to other pilots, these notations are added:

"1. I should have used the emergency releases first, instead of attempting to open the hood in the regular manner; in the excitement of attempting immediate escape and due to the wind pressure from the great speed accumulated in a vertical dive, cockpit hoods will jam, stick, or appear to jam very easily, as mine did.

"2. When a plane is in a vertical dive, it is impossible to 'jump' out in the direction which you may decide is best. The speed of the plane and the inertia of my body forced me back against the seat so that I was only able to force myself straight out. When I had forced enough of my

body out of the cockpit, the wind pressure 'toppled' me out. I must have gone directly aft, yet missed the tail.

"3. Due to the speed which the plane had when I left it, the speed of my body must have been well *above terminal velocity*, for the pilot chute of my parachute was torn off and all the section seams were pulled almost apart. I was almost unconscious due to air pressure when I left the plane and so pulled the rip cord as soon as I could reach it. With a good deal more altitude it would have been better to delay a few seconds to allow the speed of the body to slow down as an insurance against ripping the chute and lessening shock to the body when the chute opens. The only injuries I sustained were bruises and sprains received when the parachute opened."

[Note: Review Aviation Training pamphlet *Parachute Sense*.]

A Starting Tip

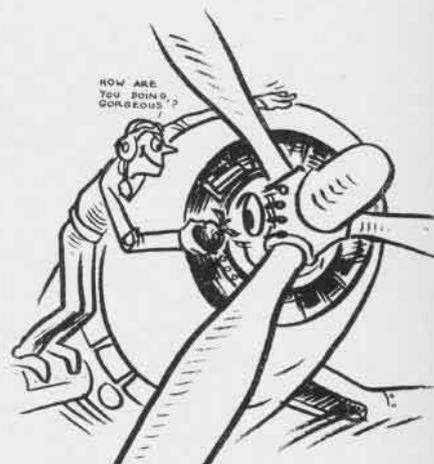
A TBM-1 airplane was recently delivered by air to an operating squadron. During the acceptance check, prior to flight, a large piece of cylinder skirt was found in the engine oil sump.

The piece of cylinder skirt had marks of the connecting rod upon it, indicating the connecting rod had been bent enough to break the piece off. This could have been caused by overpriming or by starting the engine cold, without pulling the propeller through first.

All pilots operating on detached missions are cautioned to insure that engines are started properly; that propellers are pulled through by hand before starting a cold engine.



WAS YOUR ETA ACCURATE?



Pamper Your Engine

After the installation of a new engine in an FM-1, a pilot was instructed to take the aircraft up for an engine run-in flight and to operate at low power. Shortly after take-off, the pilot noticed a strong odor of gasoline, which he thought was cleaning solvent. Upon reaching 4,500 feet, he proceeded to do a loop. Before recovery was completed, smoke filled the cockpit and the pilot observed flames beneath his feet. He immediately rolled the aircraft over and dropped out, parachuting to the ground from about 3,000 feet. The airplane burst into flames upon striking the ground.



Grampaw Pettibone says:

A guy that would punish a new engine like that would probably beat up little kids in a dark alley!

Being raised in the old school, I'm a bug on engine care. Here's an example of why: Last war's PB's were F5L's with "Liberty" engines. The Liberty engine was a good engine, but its weak spot was the water jacket. When the engine was pushed the water jacket would leak along the welded seam, and when it leaked the engine would heat up and stop. I remember on one trip from Newport to Guantanamo we were supposed to stay in formation. The trouble was that the leader had the best plane and carried the least spares. He would set the speed and by the time it trickled back to me in the tail position,



I had to fly practically wide open to keep up. So—I would ease back on the throttles and just coast along—and arrive about a half-hour after everybody else had landed. I got hell every night and a bunch of “close-up” messages every day, but it was worth it because my “flying mud-turtle” (each plane had its own insignia then) was the *only one* to reach Guantanamo (after 4 long days) without requiring an engine change.

I know modern engines are greatly improved, but they still have limitations. Each individual engine has its weak link; the thing that lets go first when it is overstressed. Engines don't always fail the minute they are mistreated (this is what makes pilots careless), but they do store it up. Failure is progressive and will catch you some day when you least expect it, and can least afford it.

That's why I explode when I run into an engine bully; a pilot with a weak mind and a strong arm who constantly runs “wide open.” Somebody has to pay the penalty for such abuse and, unfortunately, it is often you and I, who always treat our engines with consideration.

Engine restrictions aren't designed to handicap the pilot; they are put on an engine because elaborate tests have demonstrated that those are the limits of safe operation. If you are smart, you will accept these limitations.

I know war requirements sometimes demand operations far in excess of prescribed limits—and the engines have many times taken the beating and come home in one piece. Notwithstanding this, everything I have said still goes.



Don't make such excess your standard. Pour it on when you have to for safety, but get back into safe operating range the moment the immediate emergency is over. There's no need of making your job any more dangerous than it naturally is. You are driving a lot of horses, but you got to know how to treat 'em to get the most out of them. Remember, you expect that engine to take you over a lot of water and rough terrain. O. K.! TAKE CARE OF IT.

[See T. O. No. 48-43 on run-in precautions and know the restrictions of your particular engine.]

Overhaul Trouble

During engine installation in an R2D-1, an inspection tag was snipped off and its attaching wire left in the magneto. One hundred and sixteen engine hours later this caused the magneto to short out, several plugs to foul, and the engine to cut out. Thus,

this negligence (possibly due to ignorance) was the basic cause of a deferred forced landing which resulted in “strike” damage to the airplane. Fortunately, none of the 13 persons aboard was seriously injured.

Marine Warning

Marine Base Defense Aircraft Group 42 has experienced a considerable number of aircraft accidents, coincident with the influx of relatively green pilots. The Group's news letter briefed some of these accidents and expressed the hope that other pilots would benefit from the publication of these experiences.

1. One SNJ pilot made a “wheels-up” landing, resulting in the loss of the plane for at least 2 weeks. Coming in for a landing the pilot lowered the wheels and then proceeded to retract them instead of lowering the flaps. In this case “Dilbert” had groped blindly for the controls which are clearly marked and not easily confused. To forestall future, similar accidents, a 30-degree-flap rule for landings has been adopted which will necessitate observation of the flap indicators and precludes the possibility of using the wrong actuating mechanism.

2. “Dilbert” No. 2 stood an SNJ on its nose as a result of deciding to join a group of TBF's in shooting carrier landings. The pilot, assuming that the TBF in front of him was shooting another landing, was suddenly aware that this was his final landing and was confronted with the alternative of chewing up the TBF's tail or standing the J on its nose. He chose the latter and put another plane out of commission.

3. A fatal accident occurred when a take-off in an SBD was attempted with the propeller in high pitch. The airplane never became air-borne; it ran off the runway and into a swamp,



where it overturned.

4. Another fatal accident occurred when a sharp left turn was attempted with insufficient air speed. Apparently, while in the turn, the pilot kicked top rudder, causing the plane to go into a stall and spin into the ocean.

5. Another squadron suffered its first casualty when a pilot disregarded instructions to maintain contact flight rules and decided instead to fly through an opening in the overcast. After flying on top for a while, he was unable to find an opening to let down and, as a result, was forced to fly down through the overcast. Unfortunately, he crashed into the mountains.



THIS IS WHAT OFTEN HAPPENS WHEN SIMULATED EMERGENCY LANDINGS ARE CARRIED BELOW PRESCRIBED ALTITUDE.

Accident Reports

A Court of Inquiry, Board of Investigation, or an Administrative Report must be submitted on each fatal accident. Where there is no doubt as to the facts of an occurrence and no reason why sworn testimony should be obtained, an administrative report is satisfactory. It is not necessary to submit a separate report for each individual involved in an accident; for example, in a collision, only one board of investigation or administrative report, covering all personnel and airplanes involved, should be submitted. Do not forget the opinion concerning “line of duty” and “misconduct” status for all injured or deceased personnel. Convening authorities should insure that this opinion is included in forwarding endorsements where opinions are not required by precepts. [See Cts. & Bds., Chaps. IX and X, and BuAer Circular Letter 11-42.]

The above reports do not take the place of Aircraft Trouble Reports.

In making dispatch reports of accidents, some units submit a separate dispatch on each person involved. If the necessary data are available, it is desirable that such information be consolidated in one dispatch.