

GRAMPAW PETTIBONE

Know Your Emergency Equipment

The engine of an F6F-5 froze at 6000 feet. After letting down to 1000 feet, the pilot decided he could make the field. He put the wheel lever in the DOWN position, noting that the wheels started down. As his hydraulic pressure was zero, he put the hydraulic selector on FLAPS and pumped the flaps down. He made an excellent approach, but since his wheels were in TRAIL position, he made a belly landing.

The local Safety Board commented as follows on this accident: "This pilot did a swell job in bringing his plane back on a dead engine. However, it should be pointed out that, if time and circumstances permitted, damage to the plane could have been eliminated entirely had the pilot made use of the auxiliary air supply in his 'dump bottles' to lower and lock the landing gear."

PB4Y Hatch Blows Open

Reports indicate that the emergency hatch on PB4Y airplanes, located in the top of the fuselage immediately aft of the pilot's compartment rear bulkhead, sometimes blows open in flight. In one



case the navigator was knocked unconscious when this hatch blew open and struck him.

It is considered that although wear may be a contributing factor, these hatches usually come open because they were not locked securely before take-off, or because personnel hang onto the release handle while talking with the pilot or copilot. It is believed that the hatch will remain closed during flight if care is taken to secure it properly before take-off, and if personnel refrain from using handle as a hand-hold.



PV Ditching

The following is quoted from an action summary submitted by a patrol bomber squadron:

There has been a lot written about PV ditching. We have had three ditchings in which no one was more than scratched.

The first was a single-engine ditching, nine minutes after take-off. Here full power on one engine, full flap and full stalling was the method used. Power was cut as soon as the tail touched. The plane sank in from eight to twelve seconds.

The second was a dusk landing because of lack of gasoline. Again full flap, full low pitch with 20" manifold pressure and full stalling were used. The plane sank in about twenty-five seconds.

The third was a dead-stick, no-flap water landing. Again the plane was stalled. No injuries resulted.

In each of these cases the plane split on the center line just abaft the bomb-bay step. Emergency equipment was obtainable in all cases except the single engine ditching. Here the crew was in the water for about two hours with only life jackets, dye markers and one .38 revolver with tracer ammunition. They were picked up by a PBM. It is thought that the plane sank so rapidly because of the gross weight and full gas tanks.

The escape hatch failed to work on the single-engine ditching. Three men left through the cockpit side windows with no trouble. It should be pointed out that checking the escape hatch does not insure that it will work the next time. It is doc-

trine to block open the main access door with a back pad or ladder. Emergency equipment was checked each sixty hours.

This squadron believes that the PV is an easy plane to ditch without danger of personnel injury or fatality.

►Comment—It is of interest to note the general change in attitude that has occurred as regards ditching the PV. It got away to a rather poor start and soon had a bad ditching reputation. This has all been changed, however, and the plane now has an excellent ditching record—and reputation. This is due, not to the plane being any easier to ditch but mainly to flight crews having been thoroughly indoctrinated and instructed in proper ditching procedure.

Don't relax! Detailed procedure for ditching the PV is contained in Flight Safety Bulletin 11-44.

Excessive Tab Causes Failure

Recovering from a rocket firing run with the aid of elevator tab, an F4U pilot noticed a slight buffeting, but apparently paid little attention to it. He then executed another run. Buffeting increased and during the recovery, the elevator completely failed. According to the pilot, the engine pulled the plane out of the dive. With full military power, he managed to maintain flight at a critically low altitude. By making flat, rudder turns and by using flaps for increased lift, he managed to avoid hills in his flight path until he came to a valley which gave him 500 feet above the terrain, at which time he made a safe jump.

Grampaw Pettibone says:

This pilot coolly handled a tough emergency. Had he become the least bit panicky at such low altitude, death probably would have resulted.

However, the pilot created his own emergency! Excessive or jerky use of the tab undoubtedly caused the elevator failure. Par. 4 of Technical Note No. 72-44 says: "The use of elevator tabs as a means of primary control in pull-outs from high speed dives is not recommended except in emergencies such as may arise under compressibility conditions. When tab is used to lighten stick forces in pull-outs, caution should be exercised to insure continuous and smooth control of the resulting accelerations."

ABOARD SHIP the pilot learns to depend on the hand signals given him by the deck crew. These trained men are responsible for getting the equipment moved speedily, safely, so other planes may land on carrier's flight deck.





Costly Delay

Material damage due to accidental retraction of landing gear instead of flaps in JRB-SNB aircraft after landing, is estimated to have cost the Navy over \$40,000 in March alone. JRB-SNB Aircraft Service Change No. 25 apparently had not been completed on any of the planes involved.

Attention is invited to the fact that this change, dated 20 January, affected the "safety of flight" and was directed to be accomplished "as soon as practicable, compatible with the immediate military situation." Due to the considerable loss of money and flying time being experienced by this type accident, it would appear that further delay in accomplishing this change is unjustified, particularly since it requires only eight man-hours of work per plane, using material available in local stock.

Help Yourself

Too many aircraft accident reports are received in which material troubles are reported merely as "landing gear failure," "hydraulic system failure," "seat failure," "power plant failure," "radio failure," "life jacket failed to inflate," etc. This sort of reporting is of little value to the personnel charged with design and manufacture of aircraft and formulation of maintenance procedures. To be able to initiate corrective action, they must know the exact part that failed, how it failed, why it failed—and all other pertinent information involved.

Attention is invited to ARTICLE 27-302 in the new BUAER Manual which requires that "Material failures which result in aircraft accidents, shall be reported *both* by RUDM and AAR." These reports are the main source of information from operating units. A particular accident in one squadron may not indicate an important problem, but receipt of a number of similar reports from other units frequently will disclose significant deficiencies in operating techniques or material.

When incomplete or inaccurate reports are received, corrective action is delayed; thus accidents continue, with unnecessary waste of material and loss of life.

But Not the Kitchen Sink!

THIS EPIC comes from the South Pacific. It concerns the heroic efforts of a Catalina pilot and his crew to stay in the air against terrific odds.

The squadron was moving to a new base and the plane was heavily loaded, including the entire personal belongings of every one aboard.

A little beyond the half-way mark, things began to happen when one of the engines conked out. The pilot and flight engineer tried everything twice, but nothing helped. The bomber began to lose altitude fast.

Previous ditching indoctrination now paid off—flak suits, guns, ammunition and all loose weights were quickly jettisoned. The plane was still dropping, however, so the pilot told the men to heave out all personal baggage. "What about your leather hand bag?" the plane captain asked. With a start, the pilot realized he had aboard his two prized cameras and some other expensive equipment. That little bag represented close to \$900 of his hard-to-save earnings. A quick look at the altimeter, however, convinced him of the fleeting worth of all earthly goods.

"Dump it!" he yelled back.

The mad flight went on, but they still weren't doing too well. The men unbolted and unscrewed all the excess parts in the plane and dropped them overboard. Then they took off their shoes and tossed them out. When, at last, they came in sight of their destination, the pilot ordered the life raft equipment jettisoned. This did the trick. The plane held its altitude and they staggered in for the landing.

The bomber was no more than an empty shell when it stopped rolling and the men had nothing to their names but what they were wearing. They felt very lucky to be there at all, however,—until they hopped out of the plane.

When the pilot climbed out, he found the crew standing around in their stocking feet and treating him to a barrage of dirty looks. He couldn't figure it out—theoretically, they should be thinking pretty well of him. Then he looked at the plane. There, nestling under the wings, were two 1000-pound bombs he had forgotten all about.

Abandoning the 'Chute

On a routine ferry flight between Central Pacific bases, an SB2C pilot entered a severe storm at approximately 2,000 feet, went immediately on instruments, and started climbing. At 6,000 feet, the plane entered a right spin, which the pilot was unable to control. Both he and the mechanic successfully abandoned the aircraft.

The pilot was last seen by the mech making a normal descent; in fact the aviator shouted to his passenger as they floated down. After landing in the water the mechanic saw the pilot's parachute and seat-type life raft, but the pilot was not in sight. The enlisted man was picked up the next day; the pilot could not be found.

The air group commander reported that the probable cause for the pilot's disappearance was either 1. his falling out of the 'chute after unbuckling it in preparation for a water landing or 2. his misjudging the altitude and leaving the parachute too early.

► *Comment*—Both the dangers listed above must be avoided during parachute jumps.

If time permits, it is desirable to unbuckle the 'chute harness during descent. Before doing so, however, be sure to *sit well back in the sling*. Also do not remove your arms from the shoulder straps. After your 'chute is unbuckled, reach up and hold on to the risers until contact.

Experience has shown that there is considerable danger of misjudging the height above water during descent. For this reason, do not slip out of your 'chute until contact with the water is made. The danger of leaving the 'chute too high far outweighs the possibility that the parachute canopy will fall on top of you.

Review "Parachute Sense"!

GRAMPAW'S SAFETY QUIZ



ALL AVIATORS should know the answers to these questions. In the air, the penalty for not knowing may prove fatal. If you miss an answer on the ground, penalize yourself by looking up the reference.

1. When is it necessary to file an arrival message?
2. Do regulations make the wearing of shoulder harness mandatory?
3. What is the proper procedure for fitting a life vest?
4. After fitting your life vest and checking for rips, what three other checks should you always make?
5. During flight, how can you determine whether your artificial horizon is functioning and indicating correctly?

Answers on Page 48.