PART IV

EMERGENCIES

LIST OF CHAPTERS

PART IV—EMERGENCIES

Chapter 1—MALFUNCTIONING AND EMERGENCY PROCEDURES

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1 General

All system malfunctioning drills and emergency handling drills are in the Flight Reference Cards but consideration of certain emergency techniques is covered in paras. 2 to 4 of this chapter. In addition, the malfunctioning of tbe various systems is covered in the appropriate chapters of this hook as shown in the following index.

2 Considerations when abandoning

(*a*) Airborne ejection is the only proven means of abandoning the aircraft. The information given in the Flight Reference Cards concerning crash landings and ditching is for guidance only and may be invalidated by the particular circumstances. In any emergency involving escape from the aircraft, airborne ejection must be the first consideration.

(*b*) (i) *Type 4MSA seat*

Although the Type 4MSA seat has a ground-level capability the minimum height for safe ejection varies, depending on speed and attitude. Under the worst conditions, several thousand feet are required for a successful ejection.

◀(ii) *Type 6MSA seat*

The Type 6MSA (rocket) seat gives a higher trajectory and thus safe ejection under most conditions. ▶

(*c*) Normally the canopy should be jettisoned before ejection and after speed has been reduced to 230 knots. If it is jettisoned above this speed, intercomm. becomes increasingly difficult, considerable amounts of dirt may be sucked up from the cockpit floor and buffeting may necessitate use of the seat-pan firing handle. Before ejecting, it must be clearly understood by both aircrew whether or not the canopy is to be jettisoned.

(*d*) If ejection through the canopy is necessary it is essential to adopt an upright sitting position and to concentrate on forcing the head back, throughout the ejection.

(*e*) If a situation arises which will ultimately necessitate ejection, the procedure outlined in the Flight Reference Cards for "controlled ejection" ensures a safe ejection for the aircrew and that the aircraft crashes into a selected area. If the seat fails to eject after attempts have been made ◀with both handles, use of the underwater system will have to be considered or a manual bale-out will have to be made.▶ As the emergency oxygen bottle is secured to the seat, no oxygen supply will be available after a manual bale-out.

3 Considerations when using airfield arrester barrier

(*a*) Damage to external fuel tanks may occur on engagement. As this may result in fuel being spilt on hot brakes, external tanks should be emptied or jettisoned before entry.

(*b*) The canopy must be retained and closed to assist the top wire to pass over the cockpit.

(*c*) Heads must be ducked forward in case the wire penetrates the cockpits.

4 Considerations when carrier landing into emergency barrier

(*a*) If the arrester hook or undercarriage is unserviceable it is preferable to land ashore. If no diversion is available and the decision is made to recover the aircraft, the emergency barrier must be rigged. If the hook is available a decision to recover will normally be made. If the hook is not available when one or both mainwheels are unlocked a swing may develop and result in incorrect barrier engage-

ment. Under these circumstances all prevailing conditions will have to be assessed before a decision is made to recover or eject.

(*b*) (i) With no book available but with all main units locked down, the sight will be set to give a touchdown as far aft as possible.

(ii) With the book available the sight will be set to give a touchdown close to the barrier and at a shallow angle.

NOTE: If the nosewheel is unserviceable and both main units are locked down the hook should not be lowered but the sight will still be set to give touchdown as close to the barrier as possible.

(*c*) External stores should be jettisoned and fuel reduced to approx. 1,000 lb. The canopy should be retained.