

# FIELD SERVICE NEWS

# FUJI HEAVY INDUSTRIES LTD.

HEAD OFFICE

: SUBARU BLDG,

SHINJUKU, TOKYO, JAPAN

NO : FAN-023

DATE: November 25, 1971

## CHANGE OF SPIN RECOVERY PROCEDURE

The spin recovery procedure of FA-200 series aircraft is stated in the applicable flight manual, para 1-10, (e), and specifies full aileron application as well as rudder. Full statement of the present recovery procedure is as follows:

#### SPIN RECOVERY PROCEDURE

- 1. RUDDER, AILERON ---- AGAINST THE SPIN UNTIL THE SPIN STOPS.
- 2. ELEVATOR, RUDDER, AILERON ---- NEUTRAL IMMEDIATELY AFTER THE SPIN STOPS.
- 3. REGAIN LEVEL FLIGHT ATTITUDE
  NOT TO EXCEED AIRSPEED AND ACCELERATION LIMIT.
- 4. ENGINE ---- KEEP IDLE UNTIL RECOVERY FINISHES.

Concerning spin recovery procedure, however, FAR, PART 23, Para. 23.221 specifies, "The airplane must recover from any point in a spin, in not more than one and one-half additional turns after normal recovery application of the controls." It is not obvious what actual controlling procedure is meant by "normal recovery application of the controls". However, review of flight manuals of other aircraft shows that spin recovery of most aircraft is ordinarily performed by application of rudder and elevator, excluding aileron control.

Of course, application of ailerons which is specified in our present flight manual does not mean that FA-200 series aircraft cannot recover from a spin without the use of ailerons. In fact, spin recovery can be easily accomplished even if ailerons are not employed. Application of ailerons, however, seems to somewhat quicken spin recovery because of very effective ailerons of the FA-200 aircraft during spinning.

As a result of careful study of the procedure as stated above, we have decided that the present spin recovery procedure is changed to a procedure excluding aileron application in order to provide controlling technique common to other types of aircraft. Flight Tests have been conducted in the severest conditions (U category, max weight, and most rearward C.G. position), and satisfactory results obtained.

Therefore, the spin recovery procedure of the FA-200 flight manual is revised as follows:

### SPIN RECOVERY PROCEDURE

- 1. RUDDER APPLY FULLY AGAINST SPIN UNTIL SPIN STOPS.
- 2. ELEVATOR MOVE FORWARD IN A BRISK MOTION SIMULTANEOUSLY WITH RUDDER APPLICATION.
- 3. RUDDER, ELEVATOR NEUTRALIZE AS SPIN STOPS.
- 4. REGAIN LEVEL FLIGHT ATTITUDE KEEPING AIRSPEED WITHIN LIMIT.
- 5. THROTTLE KEEP IDLE UNTIL RECOVERY FINISHES.

Service Bulletin FAS-061, which includes replacement of the subject procedure placard, will be issued for the FA-200 series aircraft already delivered.