GULFSTREAM IV SERVICE NEWS NO. 91-3

<u>Section I</u> - Service Reports ATA 73 - Engine Fuel & Control

Subject: Autothrottle Check With Gust Lock Engaged

A GIV operator reported that during the ground checkout of their autothrottle servo, a loud bang was heard inside the pedestal. The checkout followed completion of a Phase II modification and was being accomplished without the engines operating and with the gust lock engaged. A visual check of the pedestal area revealed that the gust lock handle had released and could not be reset. Further inspection revealed that the shear pin had broken.

A review of the autothrottle override check in the GIV Maintenance Manual, Chapter 22-0, revealed that a force of 15 to 32 pounds per servo is required for disengagement. Therefore, it could be assumed that the power levers would advance with a force of 15 to 32 pounds each. During the follow-on investigation conducted by the area Field Service Representative, no faults could be found with the autothrottle system.

As a lesson learned from this incident, Gulfstream recommends that the gust lock be released anytime the autothrottle is being operated. This, we believe, will eliminate the possibility of another occurrence.

In addition, Gulfstream's Technical Operations has submitted recommended changes to both Honeywell's and Gulfstream's Publications Departments to incorporate a "CAUTION" highlighting this condition in the next revision of both Maintenance Manuals.