SECTION V

RCS JET DISCRETES

Sig. Ref.	Figure	
E1	18	Thruster 4d Command
E2	18	Thruster 3d Command
E3	18	Thruster 2d Command
E4	18	Thruster 1d Command
E5	18	Thruster 3u Command
E6	18	Thruster 2u Command
E7	18	Thruster 4u Command
E8	18	Thruster 1u Command
E9	18	Thruster 2s Command
E10	18	Thruster 1s Command
E11	18	Thruster 4s Command
E12	18	Thruster 3s Command
E13	18	Thruster 2f Command
E14	18	Thruster 3f Command
E15	18	Thruster 4f Command
E16	18	Thruster 1f Command

For E1 - E16:

Signal levels, source and load impedances and noise limits are specified with respect to the LGC Return (interface connector P/J 222 Pin G).

Noise Limits: 1. Switch closed ("1"): Maximum noise amplitude is +50V if noise pulse does not exceed 0.5 millisecond width at maximum repetition rate of 50 pps.

2. Switch open ("0"): Maximum noise amplitude is -50V if noise pulse does not exceed 1 millisecond width at maximum repetition rate of 50 pps.

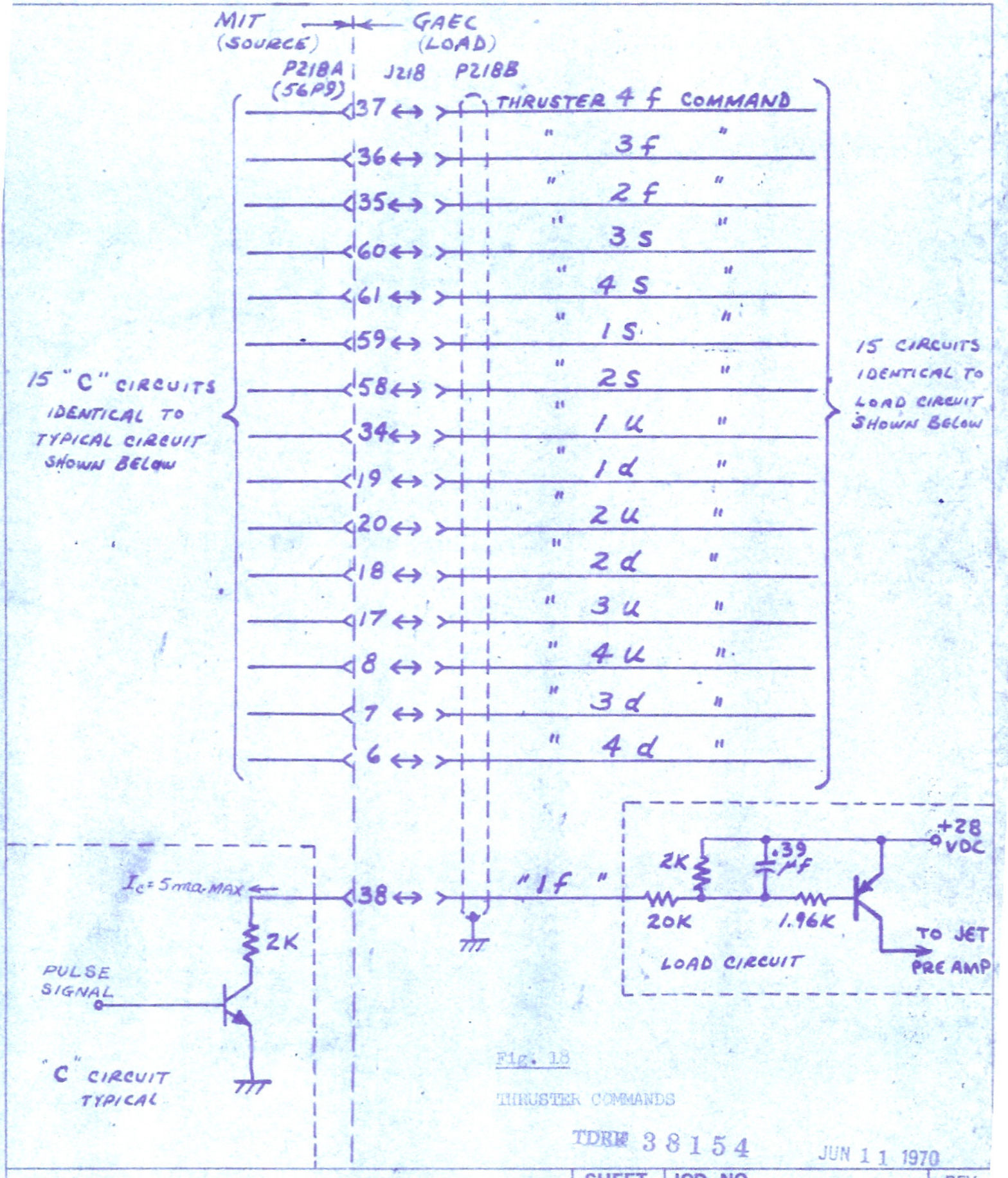

Fig. 18

THRUSTER COMMANDS

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ICD NO. LIS 370-10004

REV D

GRUMMAN AIRCRAFT ENGINEERING CORPORATION
BETHPAGE, L. I., NEW YORK

ID	SIGNAL / LOGIC	SIGNAL LEVEL DC VOLTS "1"	SIGNAL LEVEL DC VOLTS "0"	Z SOURCE OHMS ± 10% "1"	Z SOURCE OHMS ± 10% "0"	Z LOAD OHMS ± 10% "1"	Z LOAD OHMS ± 10% "0"	FUNCTIONAL DESCRIPTION
E1	Thruster 4d Command	2±2	28±11	< 3K	>500K	22K	22K	A logic "1" from the LGC to the ATCA jet pre-amp will activate the appropriate jet solenoid to fire RCS jet 4d when in PGNCS control.
E2	Thruster 3d Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 3d will be fired.
E3	Thruster 2d Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 2d will be fired.
E4	Thruster 1d Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 1d will be fired.
E5	Thruster 3u Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 3u will be fired.
E6	Thruster 2u Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 2u will be fired.
E7	Thruster 4U Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 4u will be fired.
E8	Thruster 1u Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 1u will be fired.
E9	Thruster 2s Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 2s will be fired.
E10	Thruster 1s Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 1s will be fired.
E11	Thruster 4s Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 4s will be fired.

ID	SIGNAL / LOGIC	SIGNAL LEVEL DC VOLTS "1"	SIGNAL LEVEL DC VOLTS "0"	Z SOURCE OHMS ± 10% "1"	Z SOURCE OHMS ± 10% "0"	Z LOAD OHMS ± 10% "1"	Z LOAD OHMS ± 10% "0"	FUNCTIONAL DESCRIPTION
E12	Thruster 3s Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 3s will be fired.
E13	Thruster 2f Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 2f will be fired.
E14	Thruster 3f Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 3f will be fired.
E15	Thruster 4f Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 4f will be fired.
E16	Thruster 1f Command	2±2	28±11	< 3K	>500K	22K	22K	Same as above except jet 1f will be fired.
				Source impedance for logic "0" is specified for a maximum B+ of 40 VDC				
				Source impedance for logic "1" is specified for a maximum Ic of 5ma.				

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