

TNSWO2

FUNCTION TESTER

Description

This program is intended for testing the ability of certain functional sources and destinations to accept or receive special patterns.

The ability of both D25 and D22 to receive words from the latest and earliest sources makes the program most suitable for marginal Bias checking under extremely difficult conditions.

	<u>PART 1</u>	<u>PART 2</u>
Tests	31 - 23	26 - 25
	30 - 22	25 - 26
	29 - 23	17 - 25
	28 - 22	17 - 26
	27 - 23	18 - 25
	26 - 26	18 - 26
	25 - 25	17 - 22
	24 - 22	27 - 23
	23 - 23	18 - 22
	22 - 25	18 - 23

Operation

Program cards 0 - 30

The program automatically progresses from one test to the next. The Function tested is displayed on O.S in the S and D positions.

Should the engineer desire to prolong the testing of a particular function, the TIL key should be put ON.

If one of the tests fails, the program will buzz and stop. A p32 on I.D will cause the program to buzz and go (TIL on also).

Should the testing of some sequence in program be needed, the test should be placed on the I.D., the required Source xP₅ and xP₁₀. TIL should be on.

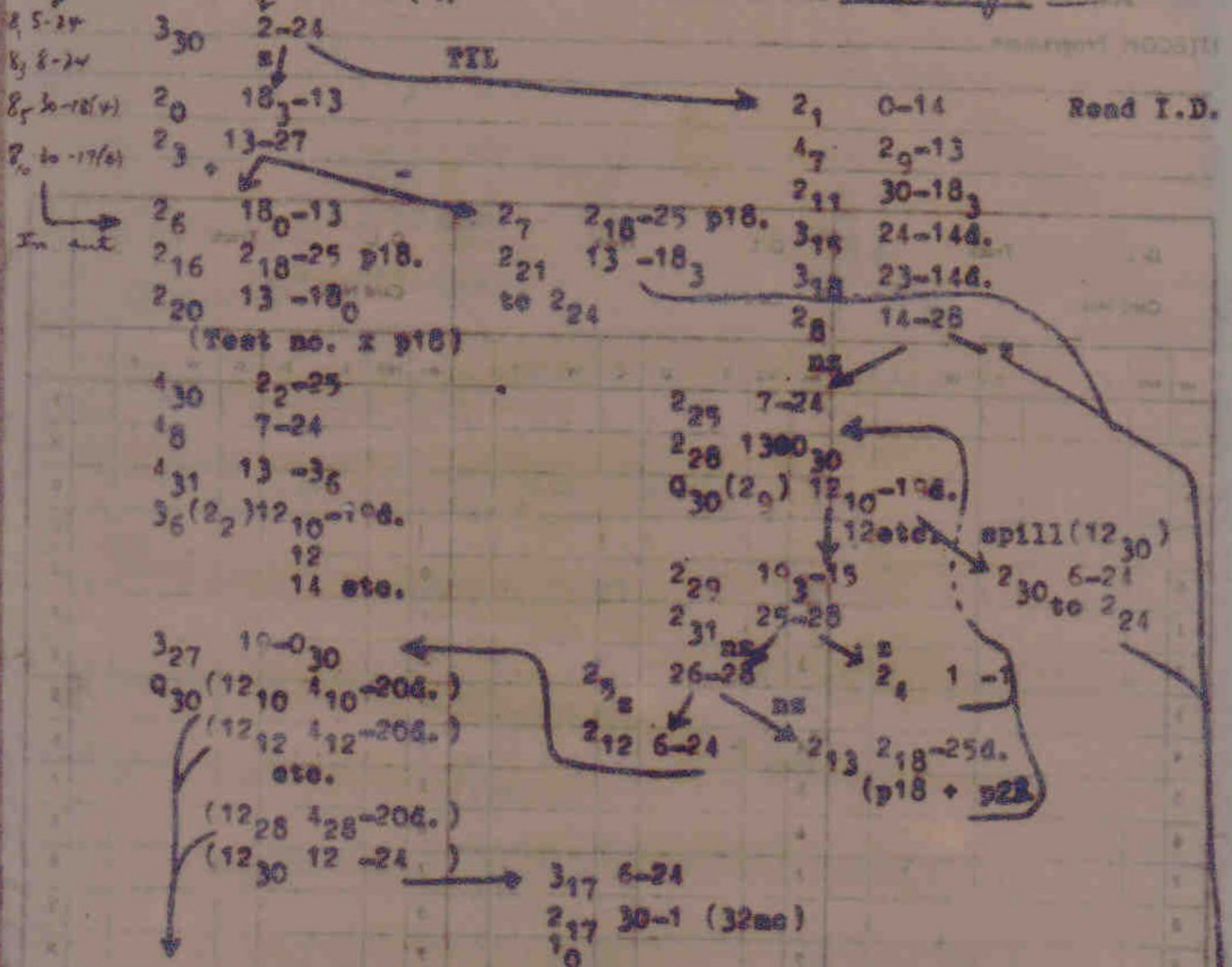
e.g. 25 - 25

After raising the TIL key the program will continue automatically to the next function as normal.

TNSW OY - CONTROL SEQUENCE ROBIN

THE UNIVERSITY OF NEW SOUTH WALES
 SCHOOL OF ELECTRICAL ENGINEERING
 Temporary 1964 (1)

ENTRY



QUAST/TEST	LEADS TO-
$12_{10} 31-23$	$3_{10} 3_{12}-17_0 p10-32$
$12_{12} 30-22$	$3_{11} 30-17_0$
$12_{14} 29-23$	$3_{11} 30-17_0$
$12_{16} 28-22$	$3_{13} 3_{15}-17_0 p26-32$
$12_{18} 27-23$	$3_{14} 3_{20}-17_0 p10$
$12_{20} 26-26$	$3_{21} 5-1 (32)$
$12_{22} 25-25$	$3_{22} 6-1 (32)$
$12_{24} 24-22$	$3_{23} 7-1 (32)$
$12_{26} 23-23$	$3_{24} 9-1 (32)$
$12_{28} 22-24$	$3_{25} 10-1 (32)$

$3_{26} 12-1 (32)$
 $3_{11} 3_3-18_3 p22-32$
 (counter)

$3_{31} 3_7-18_3 p23-32$
 (counter)

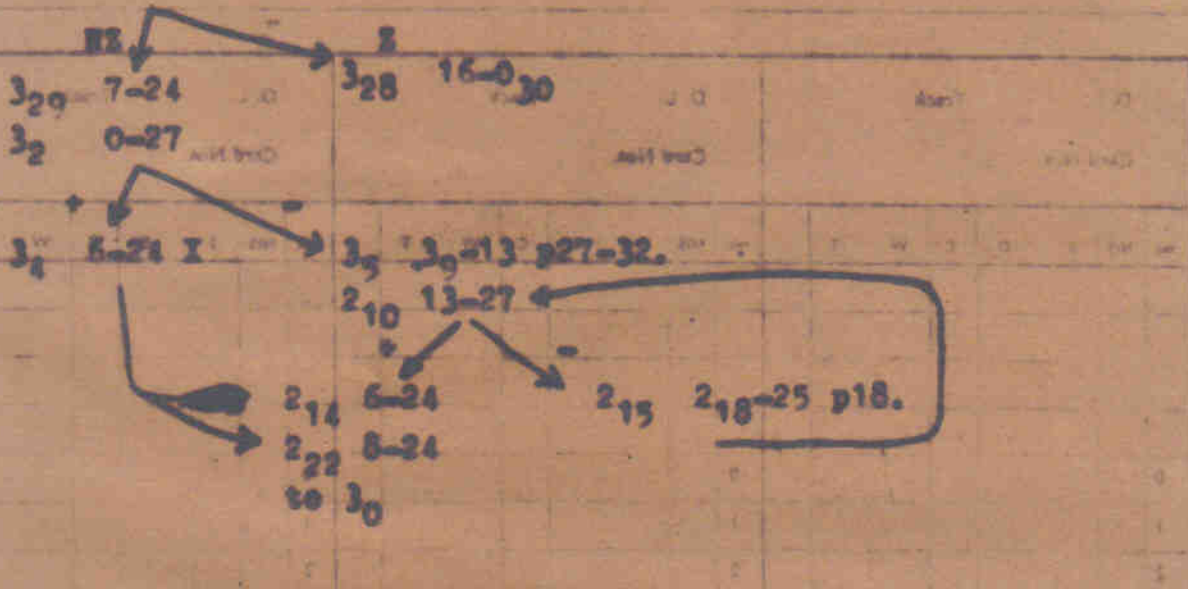
$3_8 6-24$
 $3_{15} 19_3-18_1$
 $2_{24} 20_2-16_4$
 $2_{26} 16-8 (32)$
 $2_{27} 20_3-8_{31}$
 $3_0 18_1-29$
 $4_9 4_0-16$

$3_{28} 16-0_{30}$
 $Q_{30}(4) 4_1-1-16$

$Q_{30}(4) 5_8-24$
 $1_0 3_{30}$
 Obey 1
 1-5 on successive tests (to patch data)

ALL DISCRIMINATIONS FROM 1₀ CONTINUE HERE:

1₀ 13-28 OF
21-28d.



FLOW DIAGRAM OF FETCHING OF DATA FOR FOLLOWING TESTS-

23-23
.....

(3)

1 ₁	1 ₇ -14	p1.
2	8	p17.
3	9	p1-32.
4	10	p2,4,6,8-11.
5	11	p1,31.

DL9.

1 ₁₂	1 _{17,18} -21d.	zero.
13	19,20	p25.
14	21,22	p10-32.
15	23,24	p10,12,14,16-19.
16	25,26	zero.

8 ₀	23-23 (32)
8 ₁	etc.
8 ₃₀	23-23 (32)
8 ₃₁	23-23 (32)

(1₀ 21-28d.) (SEE MAIN FLOW DIAGRAM)

24-22
.....

1 ₁	1 ₇ -14	p17,32.
2	8	p1.
3	9	p1-32.
4	10	p1,3,5,7-10.
5	11	p1,2,4,6,11-32.

DL7.

1 ₁₂	1 _{17,18} -21d.	p27-32.
13	19,20	p11-32.
14	21,22	p11.
15	23,24	p11,12,14,16,21-32.
16	25,26	p11,13,15,17-20.

8 ₀	24-22 (32)
8 ₁	etc.
8 ₃₀	24-22 (32)
8 ₃₁	24-22 (32)

(1₀ 21-28d.) (SEE MAIN FLOW DIAGRAM)

FLOW DIAGRAM FOR FETCHING OF DATA FOR FOLLOWING TESTS:-

25-25 & 26-26		<u>FOR 25-25</u>	<u>FOR 26-26</u>
1 ₁ 1 ₇ -15		zero.	p1,3,5,7.....29,31.
2 8		p1-32.	p1-32.
3 0		p16-18.	p17.
4 10		p2,4,6,11-32.	p17-32.
5 11		p1,3,5,7.....31.	p1,3,5,7-10.
1 ₁₂ 1 ₁₇ -14		p1-32.	p2,4,6,8.....30,32.
13 18		p1-32.	p1-32.
14 19		p15,17,19.	p17.
15 20		p1,3,5,7-10.	p1-17.
16 21		p2,4,6.....30,32.	p1,3,5,7-10.
1 ₂₂ 1 ₂₇ -13		zero.	p11-32.
23 28		p11.	zero.
24 29		p27-32.	zero.
25 30		zero.	p11-26,28-32.
26 31		zero.	zero.
8 ₀ S-D (32)			
8 ₁ etc.		Where S-D is either 25-25 or 26-26.	
8 ₃₀ S-D (32)			
8 ₃₁ S-D (32)			
(1 ₀ 13-28) (SEE MAIN FLOW DIAGRAM)			

25 - 25 in DL 6.

26 - 26 in DL 5.

FLOW DIAGRAM FOR FETCHING OF DATA OF FOLLOWING TESTS:-

22-25
.....

1 ₁	1 ₇	-13.	p11.
2	8		zero
3	9		p26-32.
4	10		p26.
5	11		p11,12,14,16,21-32.

DL 10.

1 ₁₂	1 _{17,18}	- 21d.	p1-32.
13	19,20		zero
14	21,22		p1,17.
15	23,24		p17-32.
16	25,26		p2,4,6,8-11.

8₀ 22-25 (32)
8₁ 22-25 (32)
8₂ "

8₃₀ 22-25 (32)
8₃₁ 22-25 (32)
(1₀ 13-28) (SEE MAIN FLOW DIAGRAM)

31-23,30-22,29-23,28-22,27-23.
.....

1 ₁	17 ₀	-13	17 ₀ is p10-32 from 3 ₁₂ for 31-23,
2	"		zero " source 30 for 30-22,
3	"		zero " " 30 " 29-28-23,
4	"		p26-32 " 3 ₁₆ for 28-22,
5	"		p10 " 3 ₂₀ " 27-23.

1₈ 13-21d.

8 ₀	S-D (32)		
8 ₁	S-D (32)	where S-D is either	31-23 or
8 ₂	etc.		30-22 or
			29-23 or
			28-22 or
			27-23.

8₃₀ S-D (32)
8₃₁ S-D (32)
(1₀ 21-28d.) (SEE MAIN FLOW DIAGRAM)