

NOR'WESTER

MAY 14, 1988

ROUTE BOOK

competition systems, inc.



KAMIER AUTO SPORTS CLUB

NO GUTS, NO GLORY

According to the organizers, this stage should make or break the Nor'wester competitor.

The big win or the big off -- The driving crew makes the difference.

To reward outstanding effort on this stage, Competition Systems will provide the team setting the fastest time, in each class, with one of the following:

35% off Racer Price on Design 500 suits for the driver and co-driver

25% off Racer Price on one or two sets of Willans harnesses

25% off Racer Price on a single purchase of underwear, harness pads, bags, gloves or neck collars

Go fast or go home.

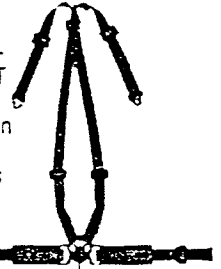
Don't risk it — rely on

WILLANS

The No. 1 Race & Rally Harness

When it comes to safety one name stands alone — WILLANS. That's why Willans are used by the TWR Silk Cut Jaguars and by more leading Formula One Teams than any other racing harness. In fact 11 of the past 14 World Champions have relied on our belts for their protection — shouldn't you do the same?

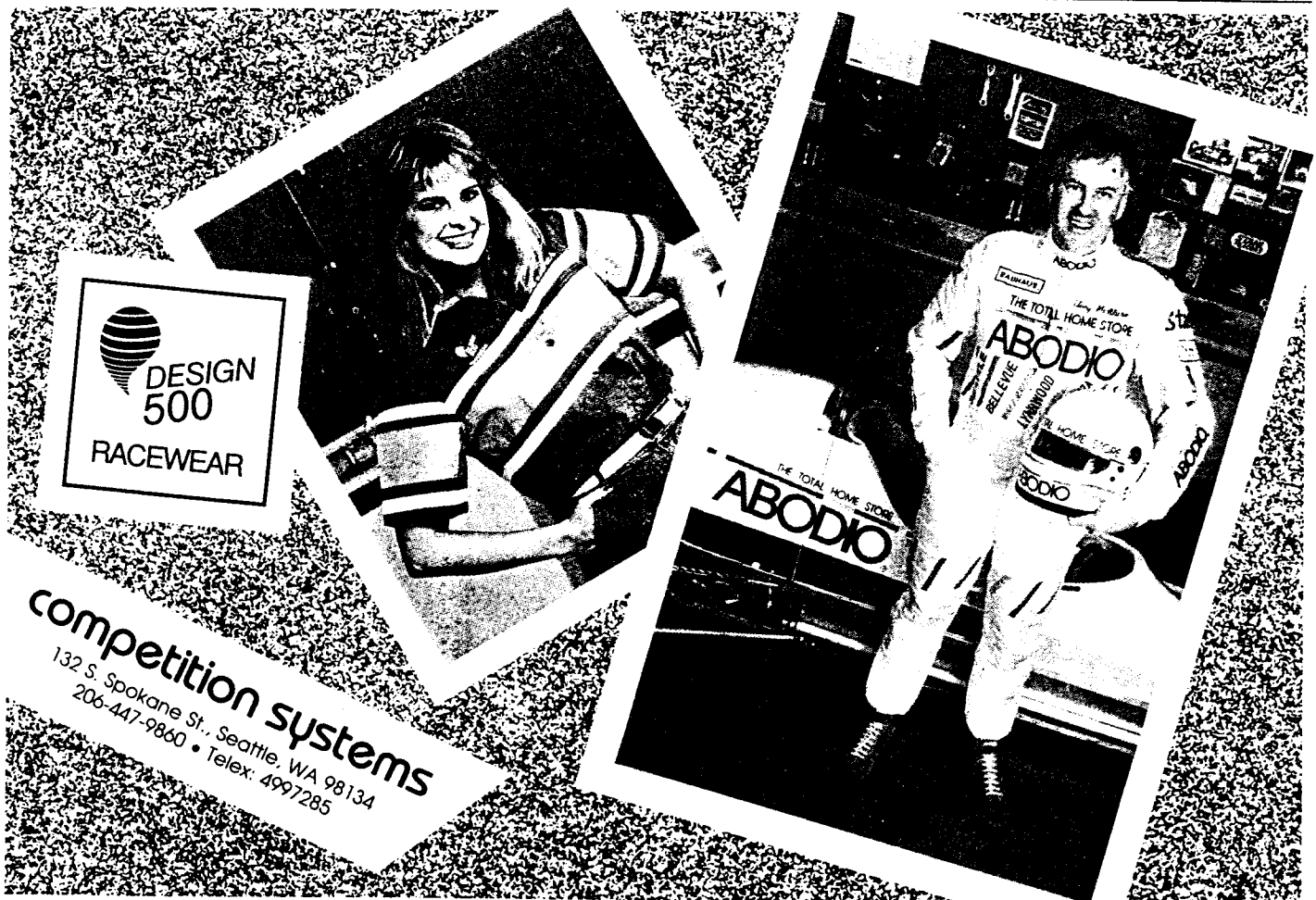
The best selling four-strap/four-point harness for saloon and GT cars as used by leading race and rally teams. Also available in a four-strap/three-point design, both feature the famous Willans aircraft type quick release buckle. Like all Willans belts, constructed to the same industry leading standards as the full F1 system.



WILLANS

competition systems

132 S. Spokane St., Seattle, WA 98134
206-447-9860 • Telex: 4997285



DESIGN 500 RACEWEAR

competition systems
132 S. Spokane St., Seattle, WA 98134
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EMERGENCY NUMBERS

POLICE NUMBERS

Mason County Sheriff	911
State Patrol	478-4646

HOSPITALS

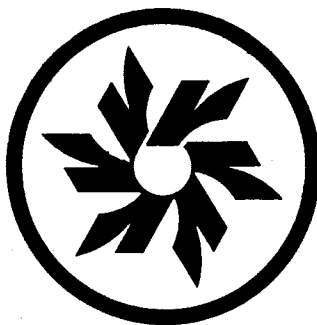
Black Hills Community Hospital	754-5858
St. Peter Hospital (Olympia)	491-9480
Mason General (Shelton)	426-1611

AMBULANCES

Olympia	491-3200
Mason County	426-1515

1988 NOR'WESTER

		FCO	Road Section Time	Road Section Mileage	Transit	Stage
MTC #1	Hilburn	6:00	20	11.66	11.66	
ATC #1	Jim's Revenge **(service)**	6:20	45	18.24	10.32	7.92
ATC #2	Dennie Ahl Hill	7:05	40	19.64	8.40	11.24
ATC #3	Spider Lake **(service)**	7:45	60	18.87	7.62	11.25
ATC #4	No Guts, No Glory **(service)**	8:45	60	18.24	10.32	7.92
ATC #5	Dennie Ahl Hill II	9:45	40	19.64	8.40	11.24
ATC #6	Spider Lake II	10:25	45	27.60	16.35	11.25
MTC #2	Dayton Lodge	11:10	*total****	133.89	73.07	60.82

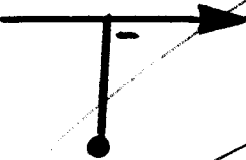


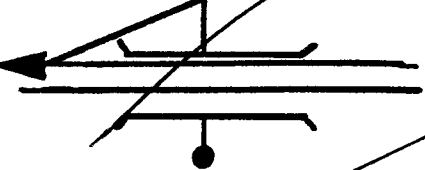
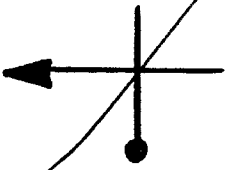


TRANSIT

FROM: START
TO: JIM'S REVENGE





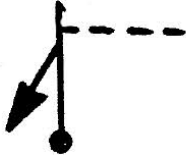

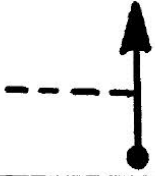

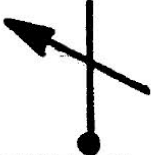

MILES: 11.66



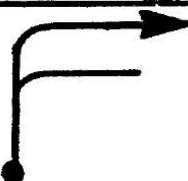




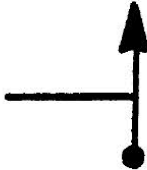
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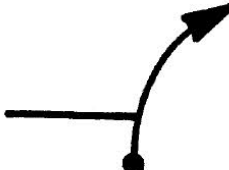


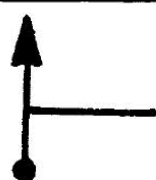


REF	DISTANCE		TULIP	INFORMATION	DECRE MILES
	ACCUM.	INCRM.			
1	0.00	0.00		MTC #1 	11.66
2	0.14	0.14			11.52
3	0.30	0.16		ONTO HWY. 101 NORTH	11.36
4	1.24	0.94		"SPEED LIMIT 55"	10.42
5	2.56	1.32		"SPEED LIMIT 45"	9.10
6	3.48	0.92		"STATE PATROL"	8.18
7	3.99	0.51		"SPEED LIMIT 55"	7.67
8	7.70	3.71		"SKOKOMISH VALLEY RD"	3.96
DISTANCE TO NEXT INSTRUCTION		3.79			


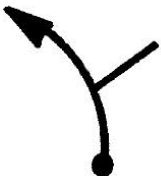
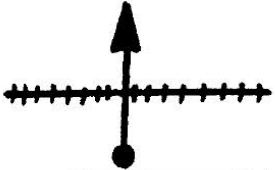
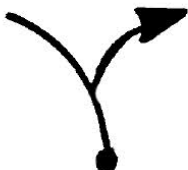
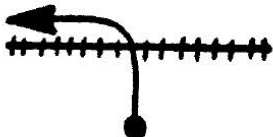

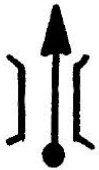

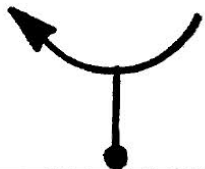
STAGE
 TITLE: JIM'S REVENGE
 NUMBER: 1
 MILES: 7.92

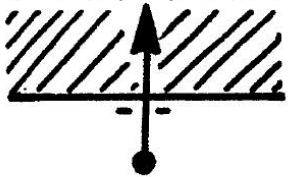
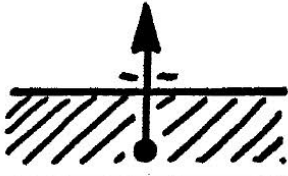
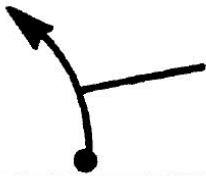

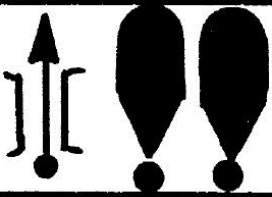

MPL TIME 10

REF	DISTANCE		TULIP	INFORMATION	DECRE MILES
	ACCUM	INCRM.			
1	0.00	0.00		ATC #1	7.92
					
2	0.09	0.09		STAGE START	7.83
3	1.10	1.01			6.82
4	1.67	0.57			6.25
5	1.73	0.06			6.19
6	2.10	0.36			5.82
7	2.68	0.58			5.24
8	3.02	0.34			4.90
DISTANCE TO NEXT INSTRUCTION		0.15			





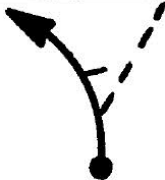


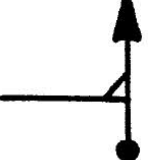
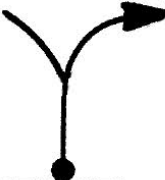

REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
9	3.17	0.15			4.75
10	3.31	0.14			4.61
11	3.56	0.25			4.36
12	4.25	0.69			3.67
13	4.31	0.06		ROUGH FOR NEXT 0.40	3.61
14	4.72	0.41			3.20
15	4.99	0.27			2.93
16	5.30	0.31			2.62
DISTANCE TO NEXT INSTRUCTION		0.27			



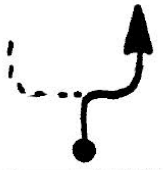
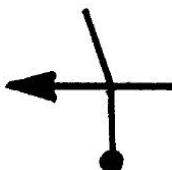
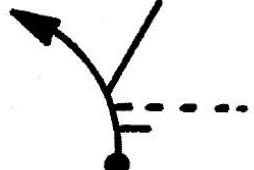
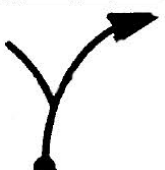


REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
17	5.57	0.27			2.35
18	6.70	1.13			1.22
19	7.16	0.46			0.76
20	7.74	0.58			0.18
21	7.92	0.18		END STAGE	0.00
22	8.26			CONTROL	
DISTANCE TO NEXT INSTRUCTION					

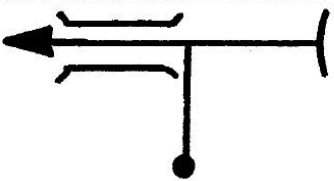




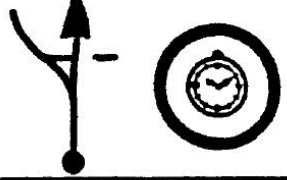
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	ACCUM.	INCRM.			
23	8.32	0.06		START TRANSIT	9.92
24	9.14	0.82			9.10
25	9.83	0.69		R X R	8.41
26	9.94	0.11			8.30
27	10.56	0.62		R X R	7.68
28	11.24	0.68			7.00
29	13.31	2.07	 	CAUTION: ROUGH OVER BRIDGE	4.93
30	14.56	1.25		"23"	3.68
DISTANCE TO NEXT INSTRUCTION		0.43			

REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
31	14.99	0.43		SERVICE AREA TURN ODO OFF AT SIGN	3.25
32	14.99	0.00		LEAVE SERVICE AREA IN OPPOSITE DIRECTION THAT YOU CAME FROM. TURN ON ODO AT SIGN	3.25
33	15.42	0.43		ONTO GRAVEL	2.87
34	15.67	0.25		TO DENNIE AHL	2.57
35	18.05	2.38		CAUTION: VERY HIGH BRIDGE. DON'T PULL ONTO THE BRIDGE MORE THAN 3 MINUTES BEFORE YOUR IN TIME	0.19
36	18.24 [0.00]	0.19		ATC # 2	0.00
DISTANCE TO NEXT INSTRUCTION					






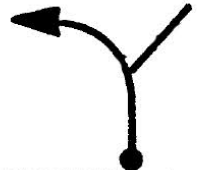
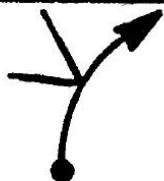

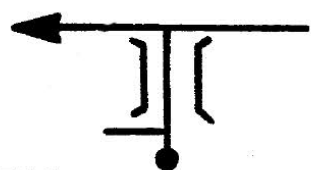

STAGE
TITLE: DENNIE AHL HILL
NUMBER: 2
MILES: 11.24 MPL TIME 10



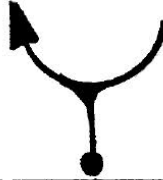

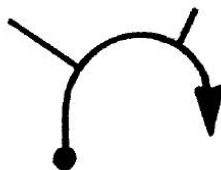
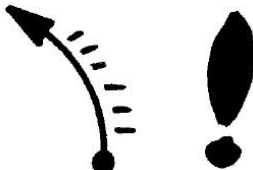


REF	DISTANCE		TULIP	INFORMATION	DECRE MILES
	ACCUM.	INCRM.			
1	0.00	0.00		ATC #2	11.24
					
2	0.06	0.06		STAGE START	11.18
3	0.50	0.44			10.74
4	0.58	0.08			10.66
5	1.89	1.31		"2301" <u>CAUTION:</u> ROAD NARROWS	9.35
6	3.08	1.19			8.16
7	3.37	0.29			7.87
8	4.57	1.20		<u>CAUTION:</u> ROCKS ON ROAD	6.67
DISTANCE TO NEXT INSTRUCTION		1.82			

REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
9	6.39	1.82			4.85
10	6.44	0.05			4.80
11	6.73	0.29			4.51
12	7.64	0.91		"2202"	3.60
13	7.80	0.16			3.44
14	10.34	2.54			0.90
15	10.65	0.31			0.59
16	11.24	0.59		END STAGE	0.00
DISTANCE TO NEXT INSTRUCTION		0.20			


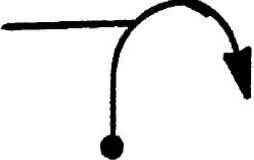


REF	DISTANCE		TULIP	INFORMATION	DECRE MILES
	ACCUM.	INCRM.			
19	11.49	0.00		START TRANSIT BEGIN QUIET ZONE	8.15
20	12.08	0.54		CAUTION ONE LANE BRIDGE--END QUIET ZONE.	7.56
21	12.67	0.59		"23"	6.97
22	12.77	0.10		PAVEMENT ENDS	6.87
23	13.50	0.73			6.14
24	16.32	2.82			3.32
25	16.98	0.66			2.66
26	19.64 [0.00]	2.66		ATC #3	0.00
DISTANCE TO NEXT INSTRUCTION					

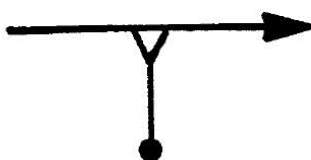
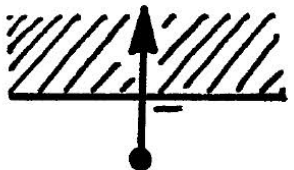
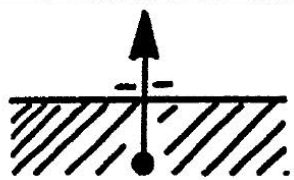
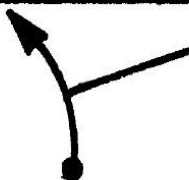


STAGE
 TITLE: SPIDER LAKE SHORT
 NUMBER: 3
 MILES: 11.25 MPL TIME 20

REF	DISTANCE		TULIP	INFORMATION	DECRE MILES
	ACCUM.	INCRM.			
1	0.00	0.00		ATC #3	11.25
					
2	0.08	0.08		START STAGE	11.17
3	0.19	0.11			11.06
4	1.06	0.87			10.19
5	1.20	0.14			10.05
6	2.38	1.18			8.87
7	2.42	0.04			8.83
8	3.18	0.76		<u>CAUTION:</u> EXPOSURE	8.07
DISTANCE TO NEXT INSTRUCTION		0.71			



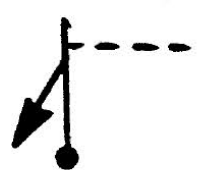

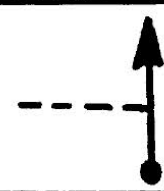



REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
9	3.89	0.71			7.36
10	4.32	0.43			6.93
11	5.30	0.98			5.95
12	5.89	0.59		CAUTION: NUMEROUS EXPOSURES FOR REMAINDER OF STAGE	5.36
13	7.49	1.60			3.76
14	7.98	0.46		CAUTION: EXPOSURE ON RIGHT	3.30
15	9.05	1.05			2.25
16	10.33	1.33			0.92

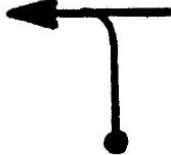

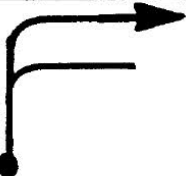




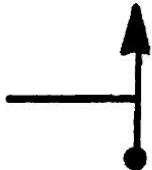
DISTANCE TO NEXT INSTRUCTION	0.12
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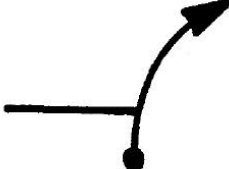


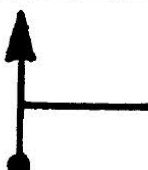


REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
17	10.45	0.12		CAUTION: WASHOUT WITH EXPOSURE ON RIGHT	0.80
18	11.04	0.59			0.21
19	11.25	0.21		END STAGE	0.00
20	11.46	0.26		CONTROL	
DISTANCE TO NEXT INSTRUCTION					

REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
21	11.46	0.00		START TRANSIT	7.41
22	12.89	1.33		ONTO PAVEMENT	5.98
23	13.89	1.00		"SPEED LIMIT 25" TURN OFF ODO SERVICE AREA	4.98
24	13.89	0.00		LEAVING SERVICE AREA. TURN ON ODO AT SIGN	4.98
25	14.32	0.43		"23" ONTO GRAVEL	4.55
26	14.56	0.24			4.31
27	16.86	2.30			2.01
28	16.91	0.05		"SPEED LIMIT 45"	1.96
DISTANCE TO NEXT INSTRUCTION		1.79			

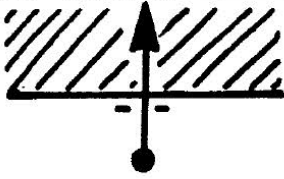
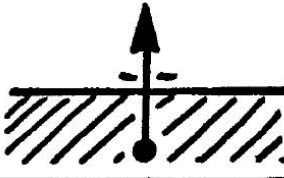
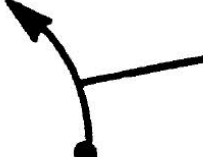

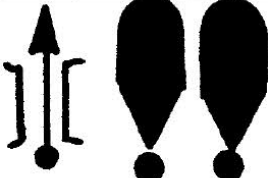

STAGE
 TITLE: NO GUTS - NO GLORY
 NUMBER: 4
 MILES: 7.92 MPL TIME 10

REF	DISTANCE		TULIP	INFORMATION	DECRE MILES
	ACCUM	INCRM.			
1	0.00	0.00		ATC #4	7.92
2	0.09	0.09		STAGE START	7.83
3	1.10	1.01			6.82
4	1.67	0.57			6.25
5	1.73	0.06			6.19
6	2.10	0.36			5.82
7	2.68	0.58			5.24
8	3.02	0.34			4.90
DISTANCE TO NEXT INSTRUCTION		0.15			

REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
9	3.17	0.15			4.75
10	3.31	0.14			4.61
11	3.56	0.25			4.36
12	4.25	0.69			3.67
13	4.31	0.06		ROUGH FOR NEXT 0.40	3.61
14	4.72	0.41			3.20
15	4.99	0.27			2.93
16	5.30	0.31			2.62
DISTANCE TO NEXT INSTRUCTION		0.27			







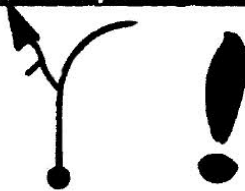
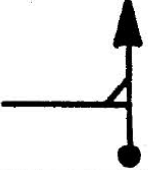
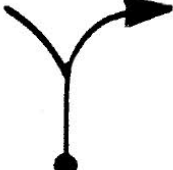

REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
17	5.57	0.27			2.35
18	6.70	1.13			1.22
19	7.16	0.46			0.76
20	7.74	0.58			0.18
21	7.92	0.18		END STAGE	0.00
22	8.26			CONTROL	
DISTANCE TO NEXT INSTRUCTION					



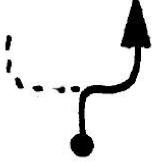
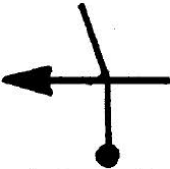
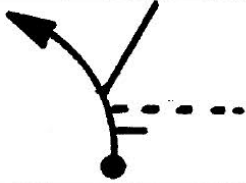
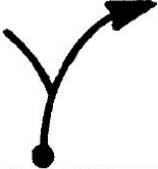
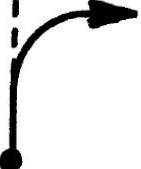
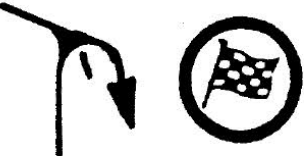
REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
23	8.32	0.06		START TRANSIT	9.92
24	9.14	0.82			9.10
25	9.83	0.69		R X R	8.41
26	9.94	0.11			8.30
27	10.56	0.62		R X R	7.68
28	11.24	0.68			7.00
29	13.31	2.07		<u>CAUTION:</u> ROUGH OVER BRIDGE	4.93
30	14.56	1.25		"23"	3.68
DISTANCE TO NEXT INSTRUCTION		0.43			

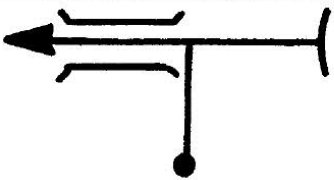




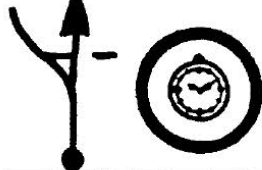
REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
31	14.99	0.43		SERVICE AREA. TURN ODO OFF AT SIGN	3.25
32	14.99	0.00		LEAVE SERVICE AREA IN OPPOSITE DIRECTION THAT YOU CAME FROM. TURN ON ODO AT SIGN	3.25
33	15.42	0.43		ONTO GRAVEL	2.87
34	15.67	0.25		TO DENNIE AHL	2.57
35	18.05	2.38		CAUTION: VERY HIGH BRIDGE. DON'T PULL ONTO THE BRIDGE MORE THAN 3 MINUTES BEFORE YOUR IN TIME	0.19
36	18.24 [0.00]	0.19		ATC # 5	0.00
DISTANCE TO NEXT INSTRUCTION					

STAGE
 TITLE: DENNIE AHL HILL II
 NUMBER: 5
 MILES: 11.24






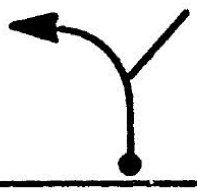
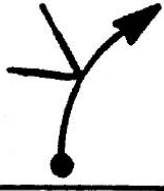

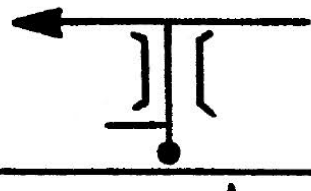


MPL TIME 10

REF	DISTANCE		TULIP	INFORMATION	DECRE MILES
	ACCUM	INCRM.			
1	0.00	0.00		ATC #5	11.24
					
2	0.06	0.06		STAGE START	11.18
3	0.50	0.44			10.74
4	0.58	0.08			10.66
5	1.89	1.31		"2301" <u>CAUTION:</u> ROAD NARROWS	9.35
6	3.08	1.19			8.16
7	3.37	0.29			7.87
8	4.57	1.20		<u>CAUTION:</u> ROCKS ON ROAD	6.67
DISTANCE TO NEXT INSTRUCTION		1.82			



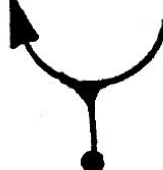

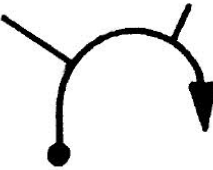

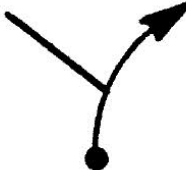

REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
9	6.39	1.82			4.85
10	6.44	0.05			4.80
11	6.73	0.29			4.51
12	7.64	0.91		"2202"	3.60
13	7.80	0.16			3.44
14	10.34	2.54			0.90
15	10.65	0.31			0.59
16	11.24	0.59		END STAGE	0.00
DISTANCE TO NEXT INSTRUCTION		0.20			

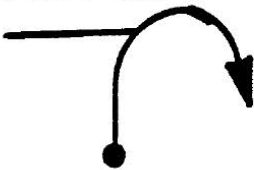


REF	DISTANCE		TULIP	INFORMATION	DECRE MILES
	ACCUM.	INCRM.			
19	11.49	0.00		START TRANSIT BEGIN QUIET ZONE	8.15
20	12.08	0.54		CAUTION ONE LANE BRIDGE--END QUIET ZONE.	7.56
21	12.67	0.59		"23"	6.97
22	12.77	0.10		PAVEMENT ENDS	6.87
23	13.50	0.73			6.14
24	16.32	2.82			3.32
25	16.98	0.66			2.66
26	19.64 [0.00]	2.66		ATC #5	0.00
DISTANCE TO NEXT INSTRUCTION					

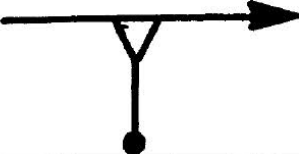
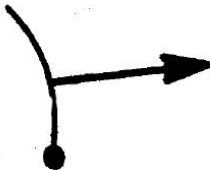



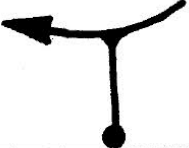
STAGE
TITLE: SPIDER LAKE SHORT II
NUMBER: 6
MILES: 11.25 MPL TIME 10

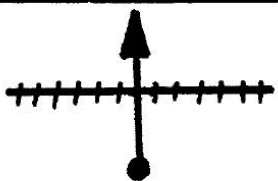

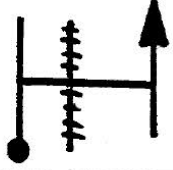

REF	DISTANCE		TULIP	INFORMATION	DECRE MILES
	ACCUM	INCRM.			
1	0.00	0.00		ATC #.6	11.25
					
2	0.08	0.08		START STAGE	11.17
3	0.19	0.11			11.06
4	1.06	0.87			10.19
5	1.20	0.14			10.05
6	2.38	1.18			8.87
7	2.42	0.04			8.83
8	3.18	0.76	 	<u>CAUTION:</u> EXPOSURE	8.07

DISTANCE
TO NEXT
INSTRUCTION 0.71

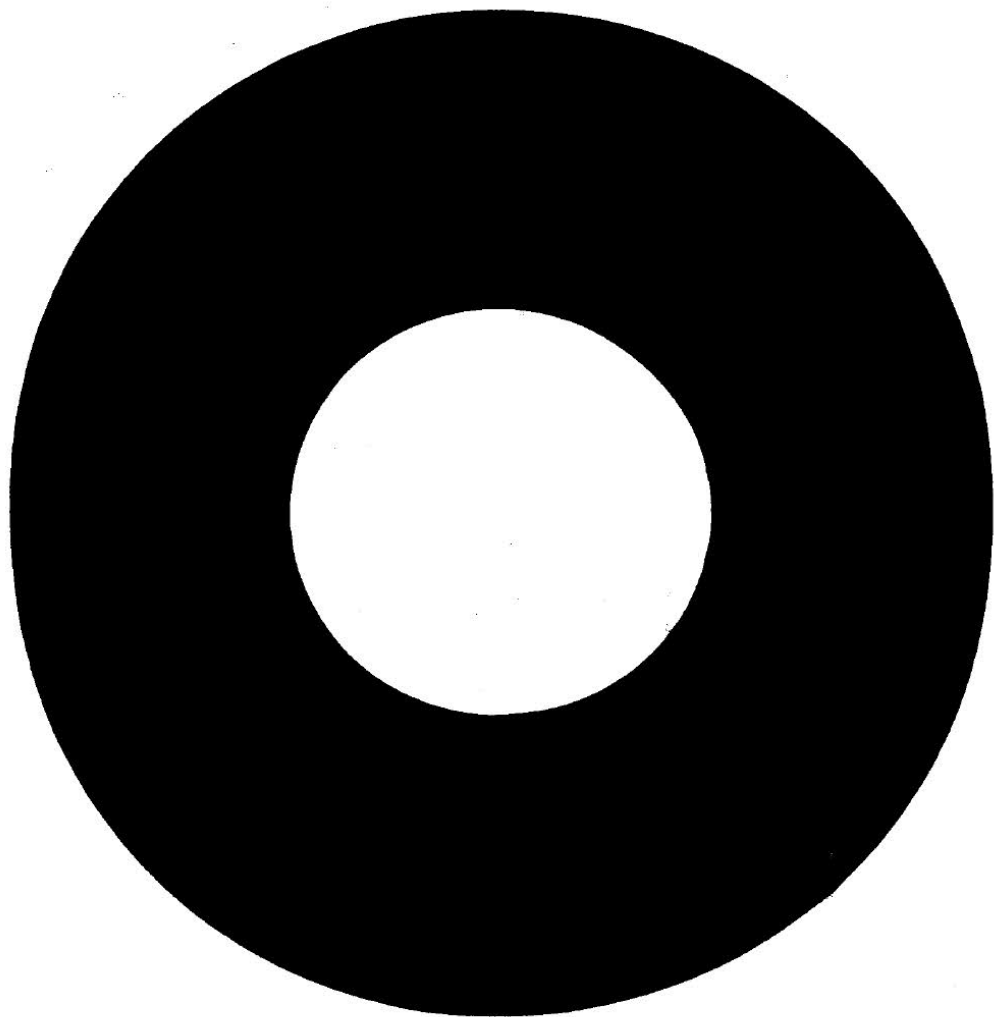
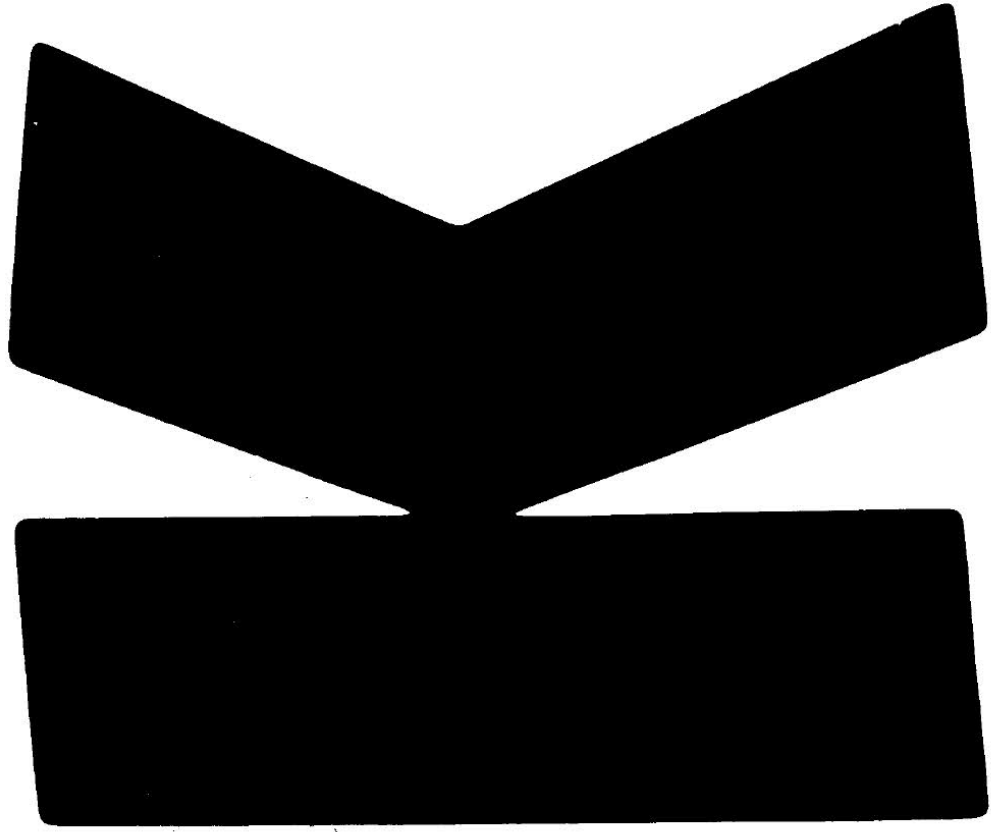
REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
9	3.89	0.71			7.36
10	4.32	0.43			5.93
11	5.30	0.98			5.95
12	5.89	0.59		CAUTION: NUMEROUS EXPOSURES FOR REMAINDER OF STAGE	5.36
13	7.49	1.60			3.76
14	7.98	0.46		CAUTION: EXPOSURE ON RIGHT	3.30
15	9.05	1.05			2.25
16	10.33	1.33			0.92
DISTANCE TO NEXT INSTRUCTION		0.12			

REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
17	10.45	0.12	!	CAUTION: WASHOUT WITH EXPOSURE ON RIGHT	0.80
18	11.04	0.59			0.21
19	11.25	0.21		END STAGE	0.00
20	11.46	0.26		CONTROL	
DISTANCE TO NEXT INSTRUCTION					

REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
21	11.46	0.00		START TRANSIT	16.14
22	12.89	1.33		ONTO PAVEMENT	14.71
23	13.89	1.00		"SPEED LIMIT 25"	13.71
24	14.51	0.62			13.09
25	15.75	1.24		CAUTION: ROUGH OVER BRIDGE	11.85
26	17.76	2.01			9.84
27	18.51	0.75		R X R	9.09
28	19.11	0.60			8.49
DISTANCE TO NEXT INSTRUCTION		0.14			

REF	DISTANCE		TULIP	INFORMATION	DECRE. MILES
	ACCUM.	INCRM.			
29	19.25	0.14		R X R	8.35
30	20.74	1.49		"CALIF RD."	6.86
31	23.87	3.13			3.73
32	24.19	0.32		"SPEED LIMIT 45"	3.41
33	27.20	3.01		"SPEED LIMIT 35"	0.40
34	27.38	0.18		"76"	0.22
35	27.60	0.22		INTO PARKING LOT MTC INSIDE BUILDING	0.00

DISTANCE TO
NEXT
INSTRUCTION



THIS RED CROSS IS TO BE DISPLAYED TO RALLY TRAFFIC BY
A CREW MEMBER IF THERE IS A MEDICAL EMERGENCY
THAT REQUIRES IMMEDIATE ATTENTION BY QUALIFIED
PERSONNEL OR A PHYSICIAN.



IMPROPER USE OF THIS RED CROSS MAY BE CAUSE
FOR EXCLUSION FROM THE EVENT.