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PLANS
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Hexagon Classic; P30
Flying Pencil Junior; Vintage

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CONTROL LINES

by IVARS AND MARIS DISLERS

TRANS TASMAN NEWS

The 1985 Trans Tasman event, originally scheduled for March, will be held on the 26th, 27th & 28th October 1985, which is New Zealand's Labour Day weekend. The venue has been changed to New Plymouth in the North Island, and the recently finished tarmac circle should be excellent for the staging of the TT. For the first time, an invitation will be extended for a team of three combat flyers to represent Australia, as well as the three man teams in F2A, F2B and F2C. By having their own flying site, there will be no problems in regard to practice before the event and, as usual, open events will be held in conjunction with the TT. New Plymouth club members have generously offered to billet all Australian team members, managers and helpers, in an effort to reduce costs.

The Trans Tasman is a symbol of friendship between Australia and New Zealand, as past competitions have borne out. Trans Tasmans are an excellent opportunity to represent Australia without the expense associated with travelling to the World Champs. The Control Lines columnists urge all who can to take part in what should be another good contest. *The Kiwi hospitality and the great scenery add up to make a NZ trip unbeatable value.*

THE 38TH NATIONALS

From a control line perspective, these Nats were almost a Victoria vs. W.A. affair, and it was a shame that more modellers from other states were unable to attend. A noteworthy exception was Andrew Heath from NSW who took out junior FAI combat and came third in senior FAI combat, thanks to the sponsorship provided by AIRBORNE and AWA Inc. I think it is fair to say that Tim Gillott from the USA dominated the competition in Goodyear, F40 Speed and Open Rat. The organisers did well to find new fields after proposed fields were withdrawn at the last minute.

Team Race was the first CL event of the Nats, held at Rockingham. Tim Gillott had impressive airspeed in the order of 18.9/10, but apparent fuel problems prevented him from achieving a consistent setting throughout the race. Only Wilson-Lumsden were able to post a quick heat time: other teams recording heats in excess of 4 minutes. Dave and Andrew Nugent made a welcome return to competition flying and joined the Victorian teams of Lumsden-Wilson and Lumsden-Randall in the final, with Lumsden-Wilson winning with a time of 8:20.

F2C TEAM RACE

	Best Ht.	Final
Wilson-Lumsden	3:49.0	8:20.1
Randall-Lumsden	4:13.9	8:27.5
Nugent-Nugent	4:14.7	DNF
Georgiadis-Prior	4:23.9	
Hunting-Hunting	4:26.1	

Gillott, the man from California, showed us how quickly he could go with his own design SHARK Open Rat, completing his 70 lap heat in 2:20 with airspeed around 265 kph! Bad luck dogged his efforts with an unfortunate ground collision in a later race. Hunting-Hunting put in a solid performance and are claiming a new record time for the final of 5:12 for 140 laps.

OPEN RAT RACE

	Best Ht. (70 lap)	Final (140 lap)
Hunting-Hunting	2:38.5	5:12.3
Wilson-Lumsden	2:57.9	5:33.7

2.5Rat Race was dominated by the Victorians with the W.A. team of Leknys-Rowney providing some opposition. A mid-air collision producing broken models eliminated Hunting-Hunting and Bellis-Greeve. In the final, Wilson-Lumsden narrowly missed breaking the record by a few laps.

2.5 RAT RACE

Wilson-Lumsden	582 laps
Lekneys-Rowney	236 laps
Randall-Lumsden	31 laps

JUNIOR 2.5 RAT RACE

Final
Lumsden-Parks 444 laps
Young-Canoby 50 laps

Goodyear provided one of the better days of racing of the Nats. Gillott, teaming up with Ron Hoogenkamp, flew his Shoestring at 17.5/10 and turned in a superb 3:45.9 heat. There has never been a Goodyear model go this fast at an Australian Nats. Kirton-Turna were also quick but had lots of problems with their cut-out activating at take-off! Wilson-Lumsden and Hunting-Hunting with 4:17.9 and 4:24.1 heats, joined Gillot-Hoogenkamp in the final. The difference between H-G and the other finalists was amazing, with H-G passing them every three laps or so. Disaster struck for H-G on the 159th lap when Ron Hoogenkamp clipped the ground a bit hard coming in for their last pit stop, ripping out the undercarriage. But for this they would surely have set a super final time. This allowed Wilson-Lumsden to go through and win from Hunting-Hunting.

The Speed events were a little disappointing, with lack of adequate preparation and testing evident in a number of cases. Several new and, in some cases, untested, models made an appearance, but didn't record a time. Gillot showed the way in F40, with his open rat proving to be superior to purpose-built speed models, recording an excellent speed of 264.8 kph. N. Pollock had the only official time in FAI speed with normally reliable equipment playing up on the day for others. The Jet flyers let most of Mandurah know when their turn to fly came, with G. Turna recording an impressive 276 kph flight with his howling horror.

F2A SPEED

N. Pollock 172.39 kph

F 40 SPEED

T. Gillott 264.8 kph
B. Butkevicius 234.3 kph
J. Hunting 232.8 kph



Tim Gillott with his very quick Shoestring Goodyear racer at the Nats. Tim comes from the USA and is ranked as one of their top racing experts. Wilson photo.



Ron Lumsden prior to the Nats FAI Team Race final. All finalists used Nelson engines, pressure refuelling via multi function valve and either half moon or Russian platform wings. Wilson photo.

JET SPEED

G. Turna	277.0 kph
A. Adler	197.3 kph
D. Axon	189.2 kph

The **Combat** events had reasonable entries, which made for an exciting two days jousting. There were four fly-aways, which had the contestants thinking that they had entered scramble a day early! Andrew Heath won junior FAI and came third in senior FAI (retired injured with fuel in the eye), which is a top effort by this coming champion. Senior FAI was won by Brian Greeve from WA, with 6 wins and one loss, from B. Randall, with 5 wins and 2 losses. Open combat was dominated by the WA flyers, with our three world champs combat flyers taking out the top three places. Bruce Bellis took top honours with 5 wins and 1 loss from Richard Bellis with wins and 2 losses.

JUNIOR COMBAT

	wins	losses
A. Heath	4	0
D. Beaton	2	2
K. Parks	1	2
G. Murray	0	2

OPEN COMBAT

B. Bellis	5	1
R. Bellis	4	2
G. Turna	4	1

F2D COMBAT

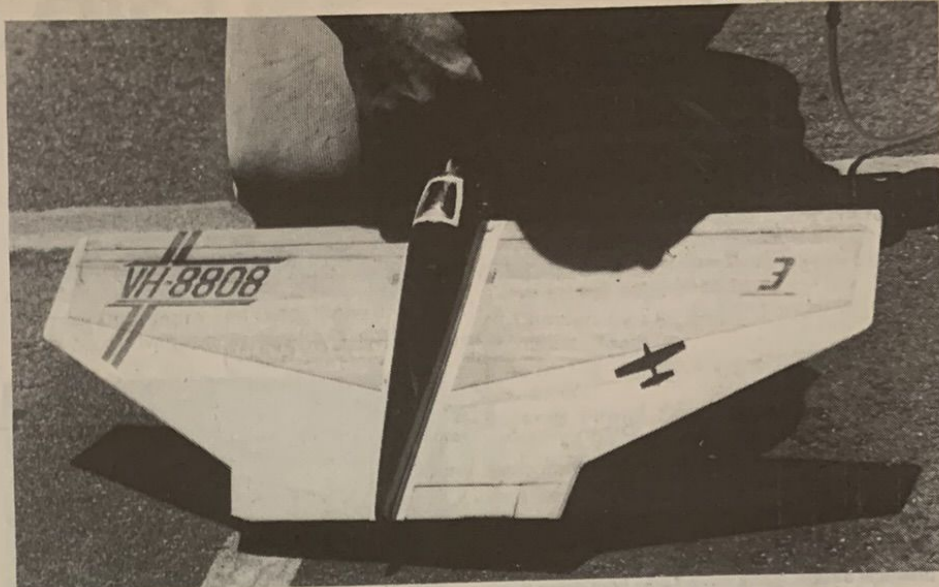
B. Greeve	6	1
B. Randall	5	2
A.	Heath	



Bruce Bellis (WA) with winning open combat model at the Nats. Note the recessed engine and long tail moment. Photo by G. Wilson. Note sports arena at Mandurah.

Seaplane provided some light relief from the more serious side of competition flying, with flyers more intent on having a good time than the final points. See the table of results.

In closing, a very special thanks to all CDs and officials, particularly those from interstate, who helped in running the events in the hot conditions. Aerobatics was not held as there were insufficient entries for an official event. The next Nationals will be held in Wangaratta (Victoria) from the 28th December to 3rd January, inclusive. The more central venue should make



Andrew Nugent's FAI Team Racer. Note carbon fibre spars behind the leading edge and mid-chord for strength and rigidity with little increase in weight. Wilson photo at Mandurah.

SEAPLANE

Name	First Flight	Second Flight
IVOR F.	120 Take Off	-175 Launching by Hand
	65 Highest Pilot Rotational Velocity	200 Successive Wingovers on 10ft. Lines
	-75 Failure to Remain Upright in Water	75 Touch and Go (Times 5)
	-60 Failure to Extend Control Lines	
	50 TOTAL FIRST FLIGHT	100 TOTAL SECOND FLIGHT
G. TURNA	-112 Three Take Off Attempts	175 Take Off into Inverted Flight
	150 Intentional Inside Loop	50 Figure of Eights
	60 Touch and Go	-148 Submarine Simulation
	-25 Touch and No Go	
	73 TOTAL FIRST FLIGHT	77 TOTAL SECOND FLIGHT
D. NOLAN	175 Take Off	100 Take Off
	-125 Failure to Complete Required Laps	165 Full Barrel Roll
		-165 Figure of Four 6 inches below Sea Level
	50 TOTAL FIRST FLIGHT	100 TOTAL SECOND FLIGHT
	J. McFALL	55 Take Off
	85 Wing Over	65 Touch and Go
	65 Landing	-225 Inverted Landing
	205 TOTAL FIRST FLIGHT	-55 TOTAL SECOND FLIGHT

TOTAL SCORES:

1. D. NOLAN	150 points
2. J. McFALL	150 points
3. IVOR F.	150 points
4. G. TURNA	150 points

it easier for most people to attend, going on past experience.

(Information for this report taken from **Circle Torque** and a report by Gary Turna of the T.K. Racing Team.)

F2D COMBAT AT THE WORLD CHAMPS

by David Nolan

Combat was run on a grassed area that was in close proximity to the other events. The grass was left very long, which made it a little hard to find control line handles and the precise location of the circles! We found that we could not get the same length run out of our pacifiers as we normally get in Australia. The team ended up mixing its own fuel rather than rely on the pre-mixed supplies that were available. This helped, but we found that we were losing around 50 seconds from our normal airtime.

We were all using a model originally designed by Steve Rothwell and modified by Gary Turna. We found these models very good, but came to realise that we build them far too heavy. The trend is still for light models and the polystyrene foam we use looks much denser than that used by the Europeans. Harken Ostman (Sweden) looked very impressive in practice with amazing turning, manoeuvres and speed. He was using a Zinger type model with hollowed out leading

edges, removable aluminium engine mounts and a covering called Fascal which is available from Bear Products. All up weight of this model, including Nelson motor, was just 368g. These models created a lot of interest and offers to purchase them.

Generally no new design concepts were seen and most competitors were using foam models powered by a variety of engines. The Australian team were using Rossi and Cox engines with either Bolly or Taipan props. (Bolly 7x3.8 seems best on Rossis, Taipan on Coxes.) Gary Turna and the Americans were using the funny plug concept, that was developed by Super Tigre on their X29 speed engine, and redesigned by Carl Dodge of F2A fame. This system uses a Glo Bee 1/2 A plug machined into a button that is secured by a retaining nut threaded into the head. This head and plug will give you a 500 RPM increase over normal plugs. The special head and the machined buttons can be obtained from Nelson, to suit the N15G.

Howard Rush (USA) featured great use of carbon fibre in his models, including the pacifier pod. His team mate, Tom Fluker (ex World Champ), also used Nelson Engines with funny plugs and he certainly looked impressive in the bouts that we saw. He was unfortunate to be eliminated later in the contest. The German and Netherlands teams featured somewhat smaller foam models than ours and the Germans powered theirs with their CTM engine, which proved to be light and powerful. These two teams ended up doing battle in the finals