

JP TRADE NEWS

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KALT *Whisper*

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Smashing down the Barriers!

The latest in the Kalt range of superb quality helicopters, and the first in the new generation of electric collective pitch helicopters.

Designed by the Kalt team around the powerful, ballraced Mabuchi 540VS motor (included) and a 9.6 volt 1100mAh nicad, (or 8.4 volt 1000mAh nicad) Whisper sets new standards in electric helicopter performance.

Available in 2 versions:

1/ Full Assembly kit (motor included).

2/ Semi-kit partly assembled containing assembled rotor head, tail gear-box, and main-frame and control system unit (motor included).

Features

A low all-up weight coupled with innovatory design features and a 4-year development programme carried out in-house at Kalt have produced a performance electric helicopter that will hover, that is capable of aerobatics, and that will fly for over 5 minutes on a single charge.

Just some of the features:

- Hollow 7mm stainless steel main shaft
- Metal tail boom
- Unique lightweight reinforced construction
- Capable of Aerobatics
- Direct swashplate control
- Coaxial swashplate
- Adjustable servo mounts
- Glass reinforced parts for strength
- Ballraced, outside tail PC
- Incredible hovering stability
- Ballraced collective pitch rotor head

9.6 volt

For Performance

8.4 volt

For Economy

Specifications

Power: 9.6 volt 1100mAh or 8.4 volt 1000 mAh nicad

Motor: Mabuchi 540 VS ballraced performance motor

Weight: 1150-1250 grams

Radio Control: 4 mini servos, Kalt Speed controller

Performance: Stunning hovering and aerobatic capability

- Kalt design experience
- Ballraced twin-wire collective pitch
- High stability toothed tail belt drive
- Accepts 1100mah 9.6 volt nicad
- Accepts Kalt electronic speed controller
- Unique, twin gear main drive system
- Dual-flex, high stability rotor head
- Adjustable servo mounts
- Long flight times possible
- Accepts standard small type gyros
- New miniature ball joint connectors

Performance

For the beginner

At last, an electric helicopter that hovers with such incredible stability that outdoor flying in fresh breezes presents no problem at all.

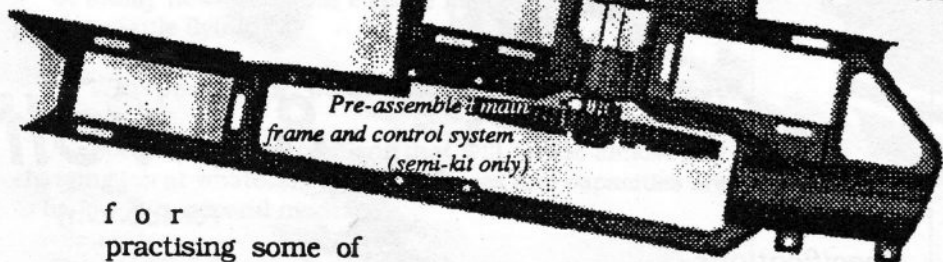
Simple and elegant design means that there are a relatively small number of parts that are not as expensive as larger helicopter parts.

The toothed belt tail drive system -ballraced in all the important places, enhances stability for the novice and further increases the flyability of the Whisper.

With durations recorded of over 6 minutes and modern fast charging techniques Whisper can provide the new pilot with the type of flying that has previously been unattainable with electric helicopters.

For the expert

The last word in convenient helicopter flying; and ideal

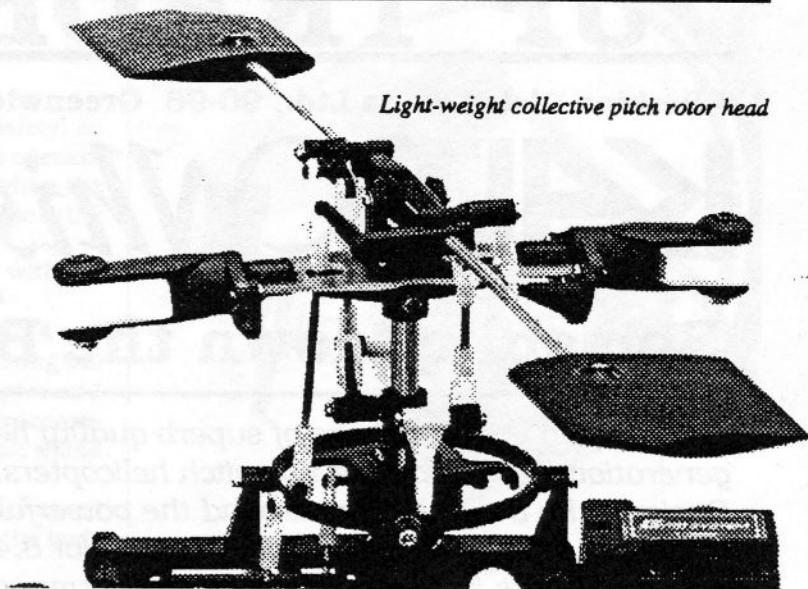


for practising some of those awkward F.A.I. hovering manoeuvres.

Yoshi Nagatsuka -guest pilot with the Kalt Helicopter Team at Sandown, proved that not only can an electric helicopter hover and beat up the sky at very respectable speeds, but that this one is capable of aerobatics -including loops!

How come it works ?...

Kalt have laboured literally for years to produce this design; and have tested and developed combination after combination until the right solution was reached. Almost 2 years ago; they developed a success-



ful prototype that would fly for over 3 minutes.

But this was not long enough.

It had to fly for at least 5 minutes.

power Mabuchi 540VS and a 9.6 volt nicad pack was crucial for developing sizzling performance; and although Kalt found that the helicopter would fly successfully for beginners with an 8.4 volt pack; they realised that high performance for experts could only be obtained by using a 9.6 volt pack.

Collective pitch and light-weight belt drive were a must.

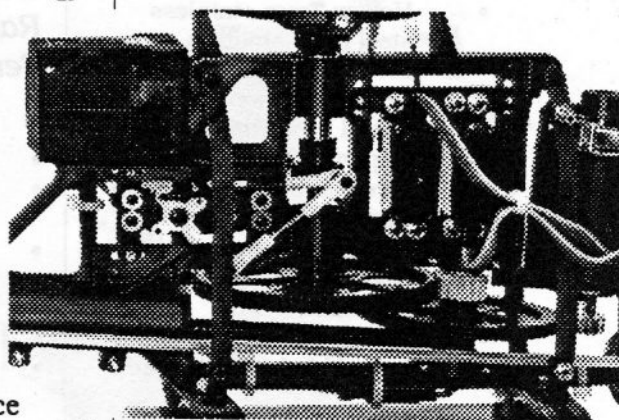
Due to the lack of ideally matched speed controllers available; Kalt went ahead and developed their own tiny FET controller to match exactly their requirements.

The result; a helicopter that sets new Word-Class standards in performance.

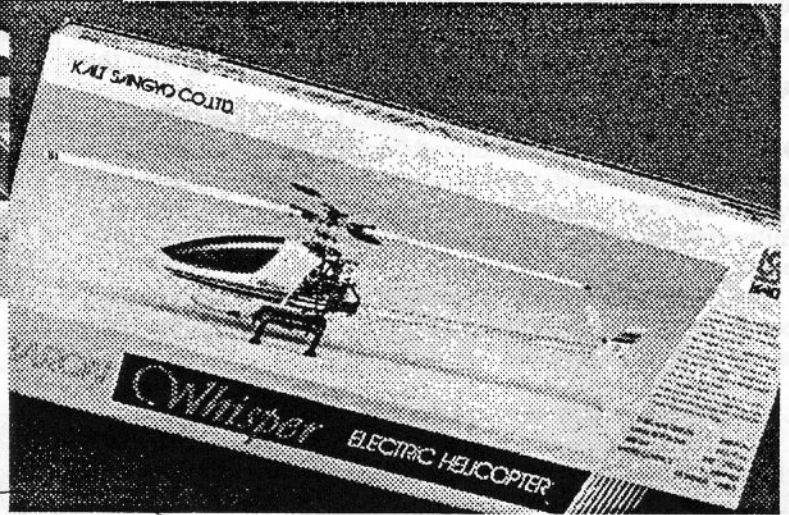
-And easily.
The answer came with super-light moulding technology, and carefully selected motor/battery combination -Whisper all-up weight *without* 9.6 volt nicad but *with* 4 servos and a gyro is an incredible 860 grams (1 pound 14 ounces)!

And Whisper is a "proper size" machine with a rotor diameter of 3 feet 2 inches; not much smaller than Space Baron with a rotor diameter of 3 feet 6 inches.

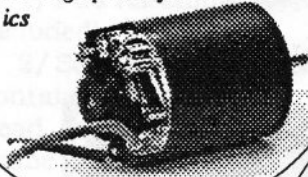
The combination of a high



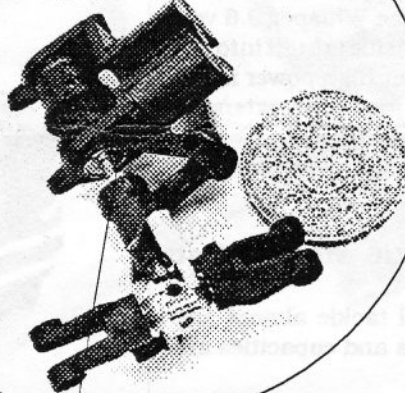
Cyclic and collective servo installation



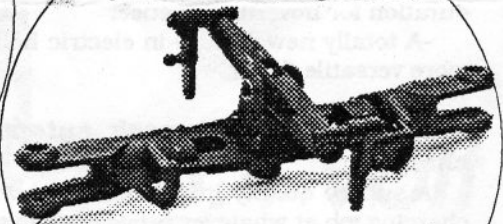
Ballraced 540VS motor with adjustable timing to match different flying styles; medium power for duration, and high power for aerobatics



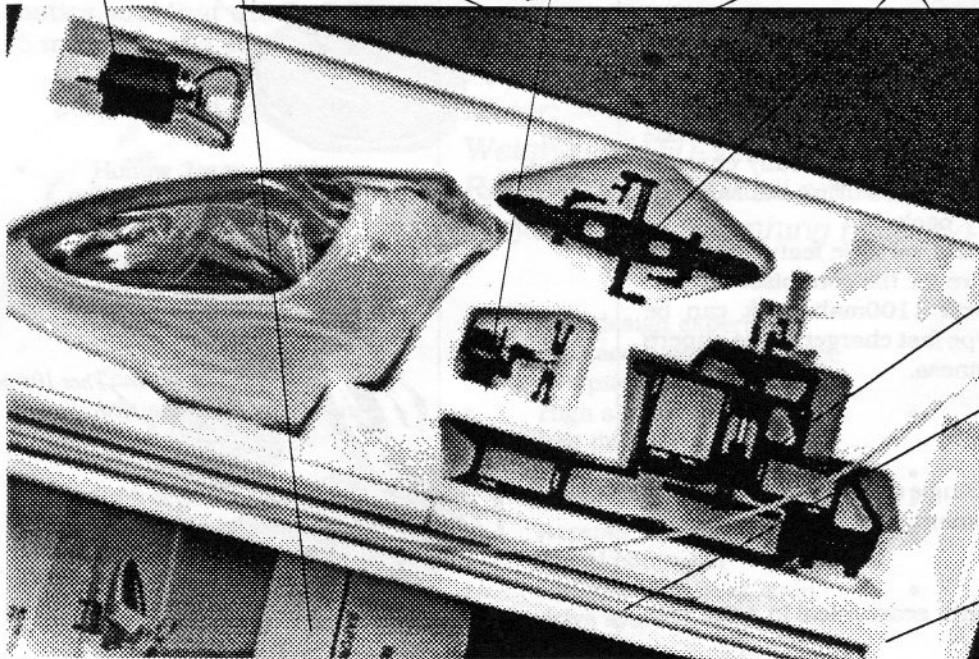
Ballraced micro tail unit with outside pitch mechanism and ball raced blade holders (weight 0.6 oz)



micro ball raced collective pitch rotor head (weight 1.4 oz)



Fully detailed 50 page step-by-step illustrated manual with safety notes, flying tips, and special electric flight techniques.



Pre-assembled main frame and control system (weight 2.8oz)

Light weight alloy tail boom (weight 0.9oz)

moulded styrofoam presentation

Whisper semi-kit detail

Whisper Accessories Notes

- **Whisper electronic speed controller.**

(i) Designed with a built in arming button for safety, so that even if the receiver is switched on and the throttle opened; the power is not passed to the 540VS motor. Only when the arming button is depressed will power be made available to the motor.

(ii) No receiver nicad is required in the helicopter with the Whisper electronic speed controller fitted.

(iii) The speed controller is designed to handle both 8.4 and 9.6 volt nicad packs, and although high performance flying will be limited when an 8.4 volt pack is used; **the helicopter and speed controller have been designed to operate successfully with either an 8.4 volt nicad pack or a 9.6 volt nicad pack.**

(iv) No receiver switch is required when the Whisper speed controller is used; a switch that can be mounted on the body is included as part of the speed controller.

- **Whisper 9.6 volt 1100 nicad.**

This is a high performance Sanyo pack developed especially for Whisper, and although an 8.4 volt pack can be used, neither performance or duration is as good as that achieved with this 9.6 1100mAh pack.

- **Mabuchi 540VS Motor**

This exceptional ball-raced motor is equipped with variable timing in order to take full advantage of the Whisper 9.6 volt 1100mAh nicad pack. A graduated timing scale is built into the motor which allows the pilot to select either high power mode for performance flying, or lower power mode for extended duration for hovering practice.

-A totally new feature in electric helicopters designed for more versatile flying.

- **Whisper delta peak automatic step-up fast charger**

A superb quality instrument that will tackle almost any charging job at whatever range of voltages and capacities are to be found in general model use.

-Safely.

The step-up feature boosts the source voltage (12 volt battery) enabling rapid charging of even 9.6 volt packs at high currents.

The *Delta Peak* automatic cut-off feature detects the voltage drop that occurs when a nicad reaches its fully charged state, and automatically switches off, ensuring the safety of both the operator and the battery pack.

The superb instrumentation and variable features of this unit make this the charging centre for the connoisseur.

Although the Whisper 9.6 volt 1100mAh pack can be charged by many conventional type fast chargers; this superb charger is undoubtedly -the business.

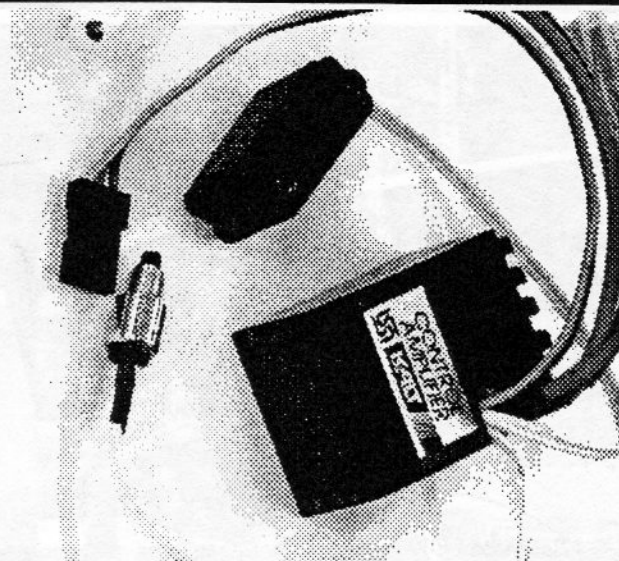
- **Whisper micro gyro.**

Weight under 45 grams!

That's one and a half ounces! Single rate, *Hall Effect* quality gyro -suits JR and Futaba equipment.

- **Whisper micro servo.**

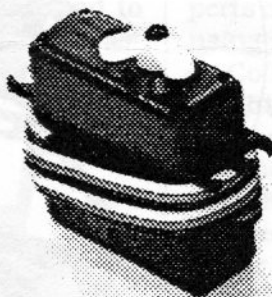
A tiny high power precision unit; economical in price with a plug that suits JR or Futaba.



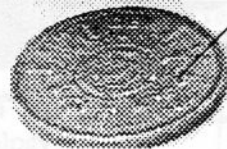
Whisper electronic FET speed controller



Whisper 9.6 volt 1100 mAh nicad pack



Whisper Micro servo



Yep!, This really is a 10p piece...



That 10p coin again...

Whisper micro gyro