Stan Acres **RR#2** Kinburn, Ont. KOA 2HO



Carb Heat Denkosh, Wisconsin, USA.

NEWSLETTER space parking space RETTER

Hot Air and Flying Rumours

Published by EAA Chapter 245 (Ottawa)

P.O. Box 8412 Main Terminal, Ottawa, Ontario, Canada, K1G 3H8

Reid keep it looking good.

invoiced to the end of April.

invoiced to the year's end.

JULY 1988

3 - Persons parking aircraft are responsible for grass

7 - Aircraft being parked for the winter only will be

8 - Aircraft being tied down later in the year will be

9 - Aircraft parking before the 15th of the month will be involced for the entire month and aircraft parking after 15th of the month will not be invoiced for that month.

Mext Meeting 15 July 7:30 PM of the lot on at the Chapter Clubhouse Carp

> Topic CANADIAN AIRMOTIVE on the mysteries of the ELT, and dynamic prop ballancing.

10 - Parking or storage invoices gown brivileges, Its

Hangars - Dave Murray President - Doug Richardson 892-5279 825-0871 Aircraft Operations - Garry Fancy Vice President - Roger Fowler 225-6070 836-2829 591-3801-Special Events - Gord Standing Secretary - Andy Douma 224-2879 Membership-Rodney Stead Treasurer - Deric Dods 692-6121 836-1410 9928659 Publisher - Dick Moore Editor - Ted Chambers 836-5554 749-0268

AIRCRAFT PARKING POLICY and SAFETY

- 1 The Owners of aircraft parking on Chapter property must be FULL MEMBERS in good standing and members of the EAA parent body based in Oshkosh, Wisconsin, USA.
- **2** The aircraft owner is required to give the Operations Officer suitable notice when he wishes to rent parking space or when he plans to vacate his parking space.
- 3 Tie down restraint of sufficient strength must be used. Wing tie downs must have a test strength of 3000 lbs and the tail tie down must have a test strength of 2000 lbs. Consult the Aircraft Operations Officer.
 - 4 Proper engine starting procedures must be used, i.e. hand propping may only be done with the aircraft suitably tied and chocked and/or a qualified person at the controls. Consult the Aircraft Operations Officer.
 - 5 Persons parking aircraft are responsible for grass cutting and grounds maintenance in the immediate vicinity of their aircraft as well as being expected to share with general grounds maintenance and grasscutting of the lot on which their aircraft is parked. This is Your airport, please help keep it looking good.
 - 6 Aircraft parked will be invoiced for the full year with refunds issued to aircraft owners that leave before the year's end.
 - 7 Aircraft being parked for the winter only will be invoiced to the end of April.
 - 8 Aircraft being tied down later in the year will be invoiced to the year's end.
 - **9** Aircraft parking before the 15th of the month will be invoiced for the entire month and aircraft parking after the 15th of the month will not be invoiced for that month.
 - 10 Parking or storage invoices will be sent out in December and payment is due before February 28th of the following year. Late payment will incur a 1.5% per month interest charge. Payment in arrears by four months (from 1 January) may result in removal of tie down privileges. Tie down privileges may be reinstated by paying all back charges plus a \$50.00 penalty fee.

Festion - Doug Richardson #82-6070 Archaft Operations - Carry Fancy #36-2828

Stretch - Roger Fowler #25-6070 Archaft Operations - Carry Fancy #36-2828

Stretch - Andy Douma #82-6121 Will Membership - Rodney Stead #36-1410

For aurer - Denic Dods #82-6121 Will Membership - Rodney Stead #36-1410

Scatter - Ted Chambers #749-0268 Pon Publisher - Dick Moore #36-5664

Eliant Lines

11 - The Chapter's maintenance hangar may be used by any Full Member in good standing for maintenance, refurbishing, final assembly adjustment, weight and balance, inspections, etc. These operations will take precedence over dead storage. Time and space requirement should be booked with the Operations Officer.

12 - Winter storage availability depends upon the amount of winter flying activity and the requirements of aircraft as described in section 10. Invoiced separately at twice the outside tie down rate.

13 - Fuel will not be stored or dispensed the Maintenance hangar.

14 - Use of the generator is subject to a nominal fee of \$1.00 per hour for fuel used and maintenance required. Please used the log book and place money in the can provided.

15 - Failure to comply with the foregoing rules may result in the removal of tie down privileges - at the discretion of the Executive Board .

> ***NOTE: THE AIRCRAFT OPERATIONS OFFICER'S TELEPHONE NUMBER IS POSTED BY THE CHAPTER HANGAR DOOR***

> I the undersigned have read and understood the above listed Parking policy and Safety rules and I agree to abide by them.

	Member's signature:
	Address:
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#I .Iuleau	EAA Number & date: Types of boad practice as no wos of stars may vary across Canada the basic sericultural information is probably.
	includes illustrated directions in now to make and nosiblon plywood me markers of orange colored places; and perstance of the colored places; and perstance of the colored places. Aircraft Operations Officer:
	Date: for the installation of lights.

Members using the facilities at Carp will be notified personally.

Flight Lines

by Nina and Olay Peterson. July, 1988.

Newsletters from across Canada:

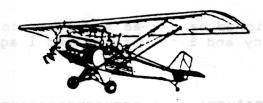
The Windsock from the Stanley Sport Aviation Association in Halifax, N.S., informs us that in spite of severe Atlantic storms, which caused delays to the Chapter activities this spring, the EAAers managed to get together for informative and educational meetings. A course on Loran C was given and a video about a Canso aircraft being salvaged from Labrador was shown. Al Smith received an EAA Builder's Badge for the completion of his VP-2. Congratulations Al!



VP-2

On the agenda for Chapter 305 is a seminar by the DOT called "Pilot Decision Making Course", which will deal with proper procedures for flying into the U.S. Social events planned for the summer include a Lobster Dinner in Mt. Pleasant, Prince Edward Island, and the 18th Annual Stanley Fly-In on Sept. 3-5, 1988.

The March Newsletter of Chapter 41 in Toronto mentions that Dom Bellissimo's Pietenpol Air-camper is making progress and includes a couple of interesting modifications. Dom has improved the gear pump of his 110 hp Corvair engine to yield a fifty percent increase in oil flow and has cast his own Bellhousing.



PIETENPOL AIR-CAMPER

In Brandon, Manitoba, homebuilders are not only involved in the construction of lightplanes but are even building their own grass airstrip. The April 1988 issue of Propwash contains detailed instructions on what type of grass to sow on an airstrip and how to apply it. Although climatic conditions may vary across Canada the basic agricultural information is probably useful. It includes illustrated directions on how to make and position plywood markers, or use markers of orange colored plastic pipe, used by the Department of Highways, which fold over when accidentally hit. For night rated pilots it also gives directions for the installation of lights.

sing the facil: at Carp will be

Chapter activities in Brandon turned adventurous this spring when a group of EAAers decided to go on a field trip all the way to Dauphin, Manitoba, to view a PA-12 being recovered with Ceconite 7600. During this trip the group also dropped in on two of the members to admire their plane building projects:

David Yacentiuk's beautifully finished Ultimate 10-200 and Bill Fisher's carefully constructed, soon-to-fly Quickie.

The Manitoba homebuilders are looking forward to a summer filled with interesting aviation events, like a picnic, an airshow, a poker derby and a 180 mile air rally with four check points manned by Ham operators.

Safety remains a priority with pilots everywhere. The Manitoba Flying Farmers and the Brandon Flying Club jointly sponsored an excellent safety seminar this spring.

Pilots who fly along Canada's West Coast are also concerned about safety.

According to Ground Effect, from Victoria, B.C., the EAAers in Victoria featured a demonstration of the new DOT approved First Aid Kit followed by a discussion, during their April meeting.

The EAA 1987 Chapter Officer award was given to Mike Betts for the completion

of his Glasair. Congratulations from Chapter 245, Mike!

Readings and Reviews: with mood event 245 resignation

There is good news for pilots who fly in the bush or Canadian Shield terrain and are bothered by the perennial crop of mosquitoes and black flies. New jackets, with face-covering hoods, and pants, are available both in adults' and children's sizes. The face-mesh which is sewn into the hood, is very fine to exclude even the tiniest insects, and now comes with a special coating against sunglare. The Bug Jackets are designed in camouflage colours of a special grey and yellow which do not attract insects. (Canadian General Aviation News, June 1988, p.8).

A new line of Halon fire extinguishers is available from Positive Safety Products Inc. Ranging in weight form 350 gram, suitable for aircraft, to six kilograms, appropriate for the workshop, the extinguishers contain a Halon blend which claims to leave no chemical residue to contaminate or corrode aircraft parts and to be three times more effective than previous products. (Aviation Trade, June 1988, p.21).

With the popularity of Loran C, the increased prevalence of Mode C in general aviation aircraft and the inclusion of instrument requirements to the private pilot's license, it is easy to see why the possibility of VFR on top is no longer as remote as it once was in Canadian airspace. COPA is recommending that DOT approve VFR on top under certain conditions with respect to weather and pilot's skills. Destination weather should have a broken ceiling of at least 2000 feet and six miles visibility, flight visibility should be at least three miles, and all aircraft should fly at least 1000 feet above the cloud. The pilot should be qualified with either a night rating, instrument rating or lapsed instrument rating from the past five years. The aircraft should be equipped with the basic six flight instruments and preferably with Loran C and an encoding altimeter as well. (The Canadian Aircraft Operator, May, no.1, 1988, p.1; Canadian Aviation, June 1988, p.4; Aviation Trade, June 1988, p.9).

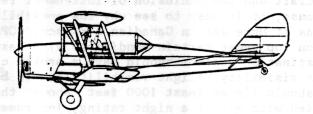
1928 was a year of significant beginnings in the history of Canadian aviation. Both de Havilland Aircraft Company of Canada and the Canadian Aviation magazine came into being, the former in the role of the active contributor and the latter in the part of the observer and commentator. A special 60th anniversary issue, June 1988, about de Havilland has been published by Canadian Aviation, which contains articles by aviation megafigures, such as "Buck" Buchanan, Dick Becker, Russ Bannock and many others.

Although a proper pre-flight check should always determine the amount of fuel on board, it is reassuring to note that, if you should find yourself a bit low on fuel, air traffic controllers will now give special consideration for aircraft in minimum fuel circumstances. Previously, consideration was only given in a situation of declared emergency. (COPA Newsletter, June 1988).

Activities in the Ottawa area:

A good place to fuel up this summer: Gatineau Airport. We apologize for incorrectly reporting fuel statistics for Gatineau Airport in the June issue of Flight Lines. Their 80/87 octane fuel is competitively priced and sells for 66 cents per liter. While you are on the field drop in to the Flight Service Station, on the second floor of the terminal building, which now handles aviation weather for the Ottawa region.

Members of Chapter 245 have been flying up and down the Ottawa Valley, taking part in the many fly-ins held in the early part of the summer. On June 12 there were no fewer than three separate fly-ins, at St-Lazare, Embrun/Russell and Cobden airports. We left early for St-Lazare and found the Unicom frequency in almost constant use by planes leaving for, or landing at, the three area flyins. Two chapter planes had already arrived at St-Lazare when we touched down: Eric Taada and Irving Sloane in the Pietenpol and the Van Tuyls in John's C-170. The delicious breakfast of eggs, pancakes and sausages got the day off to a sunny start while a ladies' barbershop quartet sang in close harmony. The St-Lazare Fly-in attracted a large number of aircraft, many of which were superbly finished and of exhibition quality. From earlier eras there was a de Havilland Chipmunk, a Tiger Moth and a maroon Stinson biplane, all in excellent shape. A Cessna 195 was shining in refurbished splendour and a not too common Luscombe deserved a closer look. Many recent homebuilt aircraft were constantly surrounded by groups of admireres. An immaculate Cygnet, built by Zig Berzins of the Montreal EAA Chapter, displayed an award label from Oshkosh 1987, and seemed to express the striving for perfection that is so characteristic of EAAers everywhere.



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TIGER MOTH

May, no.1, 1966, p. .

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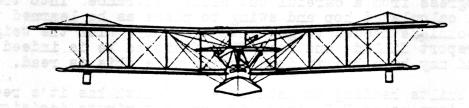
Flight Lines July, 1988 (cont'd)

We had hoped to visit the Cobden Fly-in as well, but unfortunately ran short of time. However, many Chapter aircraft did attend and, by all accounts, this aviation event was also a great success.

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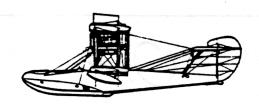
June 17, 1988, when the National Aviation Museum at Rockcliffe Airport was officially opened by Governor General Jeanne Sauve, was a proud day for the Canadian aviation community. It was a day on which the world famous Aeronautical Collection combined with the new splendid building to give birth to a truly world class museum. Rockcliffe Flying Club held a Fly-in Breakfast and provided bus transportation to and from the museum, on June 18 in honour of the museum opening. Many of Chapter 245's aircraft were present: Jim Bradley in his red and white Davis, Andy Douma in his Jodel, Charles Martel in his Sportsman 2+2, Doug Richardson in his Zenith and, of course, Eric Taada and Irving Sloan, sporting helmets and leather jackets, in the intrepid Pietenpol!

A dazzling, silver Lockheed 10-A performed fly-pasts to the pleasant hum of its twin radial engines. The museum staff, dressed in white coats, rolled out a venerable Sopwith and proceeded to coax it into putting on a splendid aerial display. Inside the delta-shaped, space-age museum building, we were greeted by a long line of aeronautical dignitaries, including the Curtiss HS-2L flying boat, painstakingly reconstructed from the original remains, which had been submerged in a river for nearly half a century. Members of Chapter 245 had the pleasure of seeing the reconstruction work of the HS-2L in progress when, a couple years ago, one of our monthly meetings was held in the museum's workshop.



CURTISS HS-2L

The Cornwall Flying Club's annual Fly-In Breakfast on June 19 was another popular event. Many interesting Cubs were present, including a Wag-Aero Vagabond and Cal Moody's price-winning caliber Cubby from Smiths Falls. Chapter 245 was represented by Doug Richardson and Rodney Stead in Doug's Zenith and ourselves in C-FQDK.



SHORTCUTS!

When working on a project sometimes you'll need a few dozen rivets but suppliers catalogues only list rivets in ounce quantities. Below is a chart that tells you the approximate number of rivets per ounce.

DASH#	AN426	AN470	DASH#	AN426	AN470	DASH#	AN426	AN470	DASH#	AN426	AN470
3-3 3-4 3-5 3-6 3-7 3-8 3-9 3-10 3-12 3-14	400 310 260 240 190 165 150 140 110	255 220 190 170 150 135 125 115	4-3 4-4 4-5 4-6 4-7 4-8 4-9 4-10 4-12 4-14	175 145 120 105 90 85 75 65	125	5-4 5-5 5-6 5-7 5-8 5-9 5-10 5-12 5-14	105 90 75 70 55 50 40 35	55 50 45 40 40 35	6-4 6-5 6-6 6-7 6-8 6-9 6-10 6-12 6-14 6-16	50 45 40 40 30 30 25 20	40 30 30 30 30 25 25 20 20

The proper size drill to use with these rivits are as follows;

RIVET	SIZE	TWIST Number	DRILL	Size
-3		40		0.098"
-4		30		0.128
- 5		20		0.159
-6		21		0.191

UNSTICKING TIRE BEADS (CHAPTER 678, Michigan)

Putting a new tire on? Is the bead stuck on the wheel? Can't break
the tire from the wheel? Don't reach for a screwdriver and damage
the magnesium wheel, just pour a little gas around the bead, wait a
while and break it loose. It works like you would not believe!

SCREW HOLDER (Ricardo Chaz Correa EAA I24246)
When installing truss head screws, I found I scratched or damaged
my project when the screwdriver occasionally slipped. I solved the
problem with this inexpensive and functional tool derivation.
The device is a length of transparent tubing of a slightly smaller
I. D. than the width of the screwdriver blade extending from the
bottom of the handle to approximately I/8" below the end of the
blade. It firmly holds the screwdriver in the slot.

Just in case you did not know there is a place in Ottawa that will do roll swedge terminations for us, with walk in service. they are located in the lower level of the Britannia Shopping Plaza. (around back) The business is called The Chandlery. Tel number is 820 7642. I believe that they also sell the terminations.

CORNES

but suppliers datalogues only list rivets in ounce quantities. Below

CH300 TRI ZENITH PROJECT FOR SALE

Items include:

- Horizontal tail completed A DSAMA #HZAGNOVAMA JSSAMA
- Rudder completed
- Vertical fin ribs, spar and skin are formed and shaped
- Fiberglass for fin and horizontal stabilizer are included
- Center spar ready for chromating and riveting
 - Trim tabs completed
 - Ailerons ready for hinge installation
 - Main spars ready for drilling de 2-4
 - All wing ribs are completed and ready for installation
 - Flap spars are bent and skins are rough sheared OII Sie
 - Landing gear fittings are completed and ready for drilling
 Square steel landing gear legs are cut to length
 Landing gear aluminum guide blocks are rough cut

 - Rubber suspension pucks are completed to specifications
 - Fuselage longerons
 - Flap motors included (unmodified)

Also included are:

- the "pop" rivets required for skin installation and the solid rivets for spar assembly.
- The required amount of sheet aluminum 6061 T-6 4 foot by 12 foot sheets

Many other odds and ends are also available.

The above package is a cross between a Zenaire materials which sells for \$4447.00 and a 45% kit which sells for \$13,870.00 from Zenaire.

Selling price for this project is \$3595.00 m lasooo revirbwerse eds medw soejord win

Enquire: A.G. Douma, 34 Jarlan Terrace, Kanata, Ont. K2L 3L5 Phone (613) 591-3801



125 HP	150 HP	180 HP
150	160	170
135	143	153
125	135	143
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600		480
N/A		650
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750		710
1800		1850
13.8		14.2
15.2	12.3	10.3
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Note: U.S.A. The Ford Javetin is a suitable engine for the CH300.

Length									22	ft.	6 in.
Height								٠.	٠.	3	2 in.
Wing span											
Wing area											
Aspect ratio											
Horiz.tail span											
Horiz, tail area		٠,		į			٠.			13 5	a.tt.
Fuel capacity					1	2	X		17	US	gai.
Option											

EAT MORE DOUGHNUTS

At each meeting of the chapter, Alex Fulton serves and sells coffee, tea and doughnuts. At the last meeting Alex presented the sum of \$250.00 to the chapter treasury. If you get a chance.let Alex know how much you appreciate his efforts.

Free Plug of 1854 insiphtus

I have recently had occasion to have some TIG welding done to prevent the loss of a stainless steel muffler. The craftsman I used was VERY good and he has a mobile unit His card is Brenno's Welding Service

CERTIFIED HIGH PRESSURE ALUMINUM-STAINLESS-STRUCTURAL RIP BRENNO 596-5963

39 Monterey Dr. Nepean, Ont. K2H 7A9 24 HR. SERVICE

Murphy's Laws of Flight

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on become severly see

T HAS LONG been known in the engineering field that Edsel Murphy's Law is the foundation of all design. Most people recognize the basic form of Murphy's law, "If anything can go wrong, it will."

Murphy's laws have been found to apply equally well to aviation; and a small sample is given below:

- Bumpy days and passengers with weak stomachs will always coincide.

- Aircraft availability is inversely proportional to the importance of a particular flight.

 All warranty and guarantee clauses become void upon payment or just prior to failure, whichever comes first.

On a long cross-country, home base will always be 5 minutes beyond the maximum range of the aircraft at the last planned fuel stop.

- Wind aloft reports will only be accurate in the cases of direct headwinds.

- Operating Manuals will express important performance figures in the least usable form.

- Answers on the FAA written examination will all be equidistant from



your computed answer. Decimal points will always be misplaced.

- Factory manuals will be wrong by a factor of 0.5 or 2.0, whichever gives the most optimistic results. For salesmen's claims these factors are 0.1 or 10.0.

- On overwater flights or over rough terrain, the engine will go into autorough at the midpoint + 10 minutes.

- Control tower trainees will not be allowed to exercise command except on weekends and other high traffic volume

Maintenance, Mechanical

- A dropped tool will hit a spot where it will do maximum damage

(Murphy's Law of Selective Gravitation).

now much

of event you this

After an inspection plate with 16 screws has been removed, it will be discovered that it was the wrong plate.

- After 16 screws have been replaced in an inspection plate, the gasket will be found on the bench.

- Any cable cut to length will be too

- Tolerances will accumulate towards maximum difficulty of assembly.

Interchangeable parts won't.

- The component most likely to fail will be the least accessible.

Maintenance, Electrical

- A fail-safe circuit will not only fail. it will destroy others as it does so.
 - Self-starting oscillators won't.
- A transistor protected by a fuse will protect the fuse by blowing first.
- Intermittent faults will remain so for the service life of the equipment.
- If a particular component is needed, it will be out of stock. Further, it cannot be made from available supplies.

(Reprinted courtesy Montana Aeronautics - Montana and the Sky - July 78.) 🔫

Low-Flying Exam

Low flying is a killer. Before you even contemplate it, try this test. It may change your mind and save your neck.

- How much airspeed will you lose if you slam your aircraft into a 45° bank turn?
- 2. What rate and radius of turn will you get in a 45° bank turn?
- 3. How much space will you need to do a 180° turn?
- 4. How much more space will you need with a 20-kt wind behind you half way round the turn?
- 5. How far away can you see a wire?
- 6. If you have to jerk back on the stick to miss a wire, how much space will it take to change the flight path upwards?
- 7. If you have to pull up quickly straight ahead, what airspeed will you have after 300 feet of climb?
- 8. What do you do if you run a tank dry at low altitude?
- 9. Will your windshield withstand hitting a 3-lb. gull?
- 10. Do you still want to try some low flying?

WOOD FINISH TIP

From Dick Von Berg, TC No. 1113, of 4403 Alvin St., Saginaw, MI 48603.

For the builders of Falco and other plywood aircraft, this is a good tip. Rather than, with much labor, totally filling the grain, only to have it show through the enamel later, do as the Modellers have recently discovered:

Sand the wood to a really fine finish, cover it with 3/4 oz. glass cloth applied dry with a brushed through mix. Mix is ENVIROTECH LITE, sold by True Value Hardware stores for a bar top finish (it is an epoxy, 2 part) \$17.99 per quart, cut 50% with isopropyl alcohol (drug store). Let dry overnight, do not sand.

Apply your choice of paint system: Urethane primer and enamel (Imron) Epoxy primer and enamel, etc. The primer is sanded. Nice things about this method; the fine glass will contour to any fillet, the weight added is minimal, and the labor added is minimal. The finish will come out like a mirror, real show plane stuff.

K-B sells the cloth through model supply houses at about \$5.50 per yard. One advertiser in Arizona lists .6 oz. cloth, which is the same stuff. Many retailers will cut a discount for quantity buys.



This material must be properly conditioned (curing resins) in order to provide optimum service life. Excessive heat applied before curing (high energy) will carburize the lining material, thus preventing the attainment of required braking coefficient.

Conditioning may be accomplished as follows:

 Perform a minimum of six light pedal effort braking applications from 25 to 40 mph. Allow the brake discs to partially cool between stops.

This conditioning procedure will generate sufficient heat to cure the resins in the lining, yet will not cause the material to become carburized due to excessive heat. Once the linings are cured, the braking system will provide many hours of maintenance free service.

Metallic Brake Lining Conditioning Procedure

This material must be properly conditioned (glazed) in order to provide optimum service life. Dynamometer tests have shown that at low braking energies, unglazed linings experience greater wear and the brake discs can become severly scored.

Conditioning may be accomplished as follows:

- Perform three consecutive hard braking applications from 45 to 50 mph.
 Do not allow the brake discs to cool substantially between stops.
- On aircraft with tail wheels, exercise caution during stopping to prevent taillifting. Due to the efficiency of these brakes, extremely hard braking could result in lifting the tail from the ground.

THERMOS HAZARDS

Be extra careful when opening Thermos bottles in flight. The bottle is probably filled with very hot coffee, and there you are cruising at 8,000 feet when it is time for coffee. The reduced air pressure can cause the bottle to literally explode when opened quickly, spraying the people in the plane with hot coffee.

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