this journal.

ORKSHIBE HIR

THE JOURNAL OF THE WEST RIDING BRANCH OF AIR BRITAIN **

VOLUME 10

NUMBER 3

EDITOR & S.A. Langfield, 67 Orchard Grove, Thorpe Edge, Idle, Bradford, Yorkshine. TREASURER) BD10 9BT(Tel.Bradford 615536)

MOVEMENTS EDITOR: T.W.Sykes, 219 Queensway, Yeadon, LS19 7PA. SECRETARY: J. Allen, 149, Adel Lane, Adel, Leeds LS16 8BW.

D.A. Senior, 23, Queens Drive, Carlton, Wakefield WF3 3RQ.

DISTRIBUTION: L.Spice, 8 Como Avenue, Girlington, Bradford. SOCIAL SECRETARY: D. Allan 16, Hawthorne Avenue, Yeadon.

BRANCH MEETING The March meeting will take place on 17th March, 3.00p.m. at the Yorkshire Aeroplane Club, Yeadon Airport (courtesy of the Directors). Mr. Peter Shackleton will be coming up from Manchester to give us his annual slide show on the airlines of the world, this has now become our best meeting and also the most popular of the year. Every one welcome.

We must thank John Allen for giving us his talk/slide show on aircraft preserved This was done at very short notice and all who attended in Britain in February.

will agree what a good job he did.

We have several trips The season of coach/beer drinking is upon us. COACH TRIPS Prices will be based on an 11 seater coach and will therelined up provisionally. fore be a little dearer, but if demand is sufficient a 29 seater will be used. We are planning a trip on Bank Holiday Monday, 15th April to the first Shuttleworth display, the cost is expected to be about £2,50 and a little cheaper to subcribers Seats can be booked now by sending a deposit of 50p to the editor(address Also on the books is a combined trip to Hendon Museum and Heathrow on above). Sunday May 12th, cost will again be about £2.50 and a 50p deposit will secure a seat.

Readers are reminded that the Second Annual Air Britain Fancy FANCY DRESS BALL Dress Ball is being held at the Yorkshire Aeroplane Club (courtesy yet again of the Directors) on Saturday 30th March from 8 p.m. till 12 p.m., bar closes at 12 p.m. Tickets are available from Dave Allan (address above) at 30 pence. A buffet is

included in the price of the ticket.

Members of Air Britain may not be aware of the fact that you can join the Yorkshire Aeroplane Club at a special rate of £2.20 compared with £8.80..

leations should be made to the Aero Club itself.

Yeadon Squadron A.T.C. may receive a Miles Magister for preservation. Aireborough Council has agreed to pay the £700 needed to provide a hard standing area for the aeroplane with a surrounding chain fence at the ATC HQ at Nunroy House Yeadon.

The Sopwith Triplane replica being built by Mr. Penny is well under way. fuselage and tail section are complete. The bracing wires are of an unusual aerofoil section on the original aeroplane and the original manufacturers have been

contacted and are to supply duplicate sets.

A VP-2, a two seat version of the VP-1, is under construction at Barnsley. It is allocated the PFA number 7207. George Shield's project the Xiphi has been given PFA 04-10005, work has not yet commenced on the aeroplane but design is complete;

he has no date when work will commence on it.

Passenger traffic through Leeds/Bradford airport was up 38% in January this year with a total of 18,180 people using the airport compared with last year's January figure of 13,198. Income was up to £16966 against £13638, a 24% increase. This is a good start to the year when one considers the conditions under which the figures were achieved.

Yeadon Aeroplanes have obtained a Scotts Flying Squirrel engine for their Flying Flea on loan from Mr.T.Coulton of Baildon. The Flying Squirrel was built in the mid-1930's at Saltaire as an adaption of the Scotts Squirrel motor cylce

engine and intended for use in the Flying Flea which was then being built in ever increasing numbers, only about 100 were built in all. The engine we have managed to obtain has without doubt at one time powered a Flea, it still carries its original engine mounts which are unmistakeably of Flea origin. Mr.Coulton obtained the engine from someone in Yeadon a few years ago and installed it in a gyro-copter he built, he flew his machine a few times from Baildon Moor, the engine is almost brand new and has hardly been run. The group has been contacted by an employee of W.P.Butterfield Ltd., who was part of the team which built a Flea in 1938/9 and flew one from Sutton Bank around that time; it is hoped that more information can be obtained from the gentleman and details will appear in a later issue of YAN. Reader Alan Madden has sent Yeadon Aeroplanes the book "The Flying Flea" by Mignet, a 193? trans-lation of Mignets book "Le Sport De L'Air"-thank you Alan.

The SSAFA air display at Church Fenton on Spring Bank Holiday Monday, May 27th has been cancelled due to a ban on RAF display flying until June. It is hoped that the display can be held a little later, possibly August 18th. Let us hope that it can be re-arranged.

ADVERTS The British Aviation Research Group's Monograph No 18 "A History of the Westland Wyvern" is a must for all serious students of British Naval Aviation history. It is professionally printed and contains a detailed account of the development of the Wyvern and individual histories of each aircraft built. It also contains photographs and line drawings showing colour schemes and Squadron markings which will be invaluable to the modeller. The cost is £1-00 in the U.K. and £1-25 in Europe and £1-75 Overseas (except Europe). All prices include postage. Please make cheques/P.O.'s payable to "British Aviation Research Group" and order from K. Davies, 6 Ryde Gardens, Yateley, Nr. Camberley, Surrey, GU17 7PX. Still available in limited numbers are the following old-style Monographs:- Valiant 40p; Belvedere 15p; TSR 2 10p.

Coming shortly from "Air Britain", the DOVE/HERON MONOGRAPH compiled by Branch members E.C. Barber, D.I. Shaw and T.W. Sykes. Watch this space!

Details have just been released from Air Anglia for their services commencing on April 1st from Leeds/Bradford, we are grateful to Andy Barker for the following schedule.

following sched Norwich Leeds Leeds Edinburgh Aberdeen	ule. 'Monday to Friday arrive depart arrive arrive	08.40 08.50 09.50 10.40 18.10 18.20 19.20 20.10	
Flight AQ Aberdeen Edinburgh Leeds Leeds Norwich Flight AQ	depart arrive depart arrive	200 rt 07.35 Monday to Friday 08.25 09.25 09.35 10.30 205 e by F-27 Friendship,	17.20 18.10 19.10 19.20 20.15 203

YORKSHIRE AIR NEWS SURVEY RESULTS

The results of the survey carried out at the end of last year proved useful and interesting, those who responded are thanked for taking the trouble to reply. The first point to emerge was the fact that civil and military interests are fifty fifty which is very satisfying, we are aware that the magazine is civilly biased which is due in the main to the interests of our main contributors who are civilly inclined and the fact that Yorkshire is, in the main, not a very active military area apart from its obvious training role. It is, of course, up to our military readers to prove me wrong by sending in more military news. As for the articles arousing the most interest among readers the most popular was by far the Airfield News and Review roundup, not surprisingly the movement review came second. Articles on Yorkshire Aviation came third, this is almost entirely Ces Mowthorpe's work and I am sure we appreciate and enjoy his articles. One surprise was the popularity of Flyovers, a feature which will be expanded in future issues.

HELICOPTER ACTIVITY February: Jet Ranger: G-AWRI Hull 1,13,14,27; Kirmington 6; Grindale 7; Immingham 11; Scunthorpe 11; Chesterfield 14; Masham 15; Harrogate 19; Bridlington 21; Ripon 21; Thirsk 25; Grimsby 25; Sheffield 25; Topcliffe 26; Doncaster 27.

G-AYMX Heartshead Moor Service Station 4; Sawood House, Thorner 17;

G-AZRU Pontefract 13; Huddersfield 15.

G-BBES Ferrybridge 14,19.

G-BBUX Thorner 19.

G-BBUX Thorner 19.

G-BBSP Wetherby 24; Huddersfield 23.

G-ASHJ Brighouse 7, 21.

G-ASHJ Scarcroft 12: Poole 14,15. Hughes

Brantley

G-ATDM Scarcroft 12; Poole 14,15. Hiller

G-BAGK Pateley Bridge 20. Gazelle 13730 Menwith Hill 21. Iroquois

February: OTHER AIRFIELD MOVEMENTS

CHURCH MENTON: To Liverpool (LBA 10.09) also 13. 1 G-AZLG Baron ACASTER MALBIS: From Elmdon T. Leeds. 5 G-AZNL Cherokee Arrow CHURCH FENTON: (LBA 13.55). 6 G-AYPC Queen Air LEEMING: From Prestwick to Northolt. 7 17892 Convair T-29 ELVINGTON: To Norwich (Ott at 16.15). 11 G-AYBO Aztec LEEMING: F. Prestwick T. Northolt. FINNINGLEY: From Swansea (Mil at 11.23 13,000ft). 14 17901 Convair T-29 19 G-AXAW Cessna 421 CROSLAND MOOR : From Crutchfield Manor. 20 G-BAIG Seneca LEEMING: From Stapleford, inbound at 12.00. DONCASTER: From/to Edinburgh (LBA at 18.54 & 12.18). G-AXFA Aztec 21 G-AVNI Twin Comanche CROSLAND MOOR: To Tees-side (LBA at 13.15). 22 G-AWMP Cessna 172 TOPCLIFFE: From Leeds to Bagby. 25 G-ARDY Tipsey Nipper DONCASTER: From/to Leeds. G-BBKD Cessna FRA150 FINNINGLEY: To Leeds. 28 G-AYNB Navajo LEEMING: From Prestwick to Northolt. 15169 Convair T-29

AIRFIELD NEWS AND REVIEW

Jet Ranger G-BADS , which was believed to be based here was w.f.u BURNISTON: on 18th September.

Movements for January and February, courtesy of Geoff Abbott. CROSLAND MOOR:

29.1 G-ATFL Cessna 172

8.2 G-BAXE Hughes 269.

22.2 G-AWMP Cessna 172 f. Leic. East. 23.2 G-BBSP Hughes 269 to Leeds.

23.2 G-BBFD Cherokee Arrow f. Tollerton 24.2 G-BASP Hughes 269.

The Hughes 269 on the 8th January was apparantly on crew training exercises.

George Shield's Xyla G-AWPN was damaged here on 18th February NCASTER: when it struck a horse on take off, it was not badly damaged.

A visit on 12th February to the airfield by the editor and Dave Allan gave us the first full report on the residents for some months. To bring the

list more up to date from that one given in January they are as follows: G-AVUX Cessna 172 G-AKEK Gemini G-ASUB Mooney M, 20 G-AWPN Shield Xyla G-ASAI Airedale G-AVWR Cherokee Arrow G-AXLS Jodel D.105 G-AWIG Jodel D.112 G-AYTG Cardinal G-BBCI Cessna 150

G-AWLA Cessna 150 G-ASCJ Comanche Not seen but believed to be still here are Condors G-AWSR, G-AYFF and G-AWSS with Falke G-AYUM. Gemini G-AKEK was in the Eastern Aviation hangar, stripped completely down, for what appears to be quite a substantial rebuild; also in their hangar were the wings of Beagle 206 G-AVCI which were changed some time ago. Eastern Aviation continue to deal in Swedish aircraft, Cherokee SE-EON was parked outside and Cessna FR172 SE-FKG was inside.

Doncaster Sailplanes are not sited at Doncaster airportas was discovered by the editor and Dave Allan recently - but a few niles away near to the Power Station. Having successfully passed through the picket lines we found their buildings down a short track. Up till now it was believed that the company existed only to sell materials to the would-be aeroplane builder,

this belief proved totally wrong and their premises proved to be a gold mine of interesting items. The first discovery was the fact that a Squarling SA102-5 Cavalier was being built (an article on this aircraft appears elsewhere in the magazine). This example will fly later this year and will most probably be the first example to fly in the country, our first visit to Doncaster Sailplanes was made on 12th February and on this date the fuselage was almost complete and the wings had been finished, by the 16th the fuselage and wings had been mated. Another machine is being built by D.W. Buckle with the PFA number 1593 and registered G-AZHH, this is under construction at Tees-side.

The company purchases gliders, refurbishe them and then resell them, several were in from Germany, including a Scheibe believed to be D8225 (the markings had been painted out). Another aeroplane had been bought in Germany this was a Sperling SF 23A, D-EGIZ c/n 2013, a high wing, single engined monoplane which was purpose built for glider towing. This is the only example in the country and was brought over from Germany by trailer a few months ago, it will probably be based at Dishforth shortly.

New resident at Driffield is Aztec G-BBRJ which replaces Twin DRIFFIELD: Comanche G-AZIA.

Noted here on 25th February were Vulcans XL378, XM651 and Victors XA938, XH619. Also present was a Hunter T.7 which unfortunately defied identification.

LEEDS/BRADFORD: February n	ovements:		
1 G-AVWD Cherokee G-AZLG Baron 58	G-AZZV Cessna F.172 G-BBBJ Pa-23 Aztec	G-ATHJ	Aztec
2 G-AXAY Jet Ranger 3 G-ATMB Cessna F.150	G-BAVJ Pa-31 Navajo		
4 G-AXAY Jet Ranger 5 G-AYLJ Pa-31 Navajo	G-AZTB MBB 209 Monsun		Pa-23 Aztec
G-AZNL Cherokee Arrow	G-AZFR Cessna 401B	G-BAOO	Cessna 421B
G-BAZK Cessna 340	F-BUYI Falcon 20 G-ATAI DH 104 Dove	G-BAVJ	Pa-31 Navajo
6 G-AXFE King Air G-BARR HS 125	G-BAXE Hughes 269A	G-BBNO	Pa-23 Aztec
G-BBPV Pa-31 Navajo	70 Frain Comanch	2 (H=1) -	
7 G-AZZV Cessna F172	G-AYSB Pa-30 Twin Comanch G-AVYL Cherokee	G-AZILI I	Cessna F.150
G-ATYN Cessna F.150	G-BAHT Cessna F.172	G-BASL	Cherokee
G-ATSM Cessna 337 G-BBPV Pa-31 Navajo	G-BBLA Cherokee	XR445	DH114 Heron 2
F-BPMC HS 125	G-AYBO Pa-23 Aztec	G-AZZV	Cessna F.172
8 G-ATAI DH Dove	G-ASRE Pa-23 Aztec	G-BAWY	Pa-23 Aztec
G-ATMJ HS 748 G-BACB Pa-34 Seneca	G-BBDR Pa-31 Navajo	OO-LFD	Cessna 421
9 C-ATJR Pa-23 Aztec	G-AZWW Pa-23 Aztec N14493 Cessna FR172 n/s		
10 G-BBRJ Pa-23 Aztec n/s	G-AXPU HS 125	G-AXFG	Cessna 337
11 G-ATAI DH 104 Dove G-BAVJ Pa-31 Navajo	G-BAZA HS 125	G-BASK	Pa-23 Aztec
G-BBIM Cessna 310Q	G-BBIT Hughes 269B	C_BASK	Pa-23 Aztec
12 G-AWKW Pa-24 Comanche	G-AVJP Cherokee G-BBIT Hughes 269B	G-ARBI	DH 104 Dove
G-BBIM Cessna 310Q	G-ATDM Hiller UH12E		Cessna F.172
G-ATSM Cessna 337 G-AT J HS 748	G-BAHT Cessna F.172	G-BASK	Pa-23 Aztec
G-BAOP Cessna FRA 150	G-BBPV Pa-31 Navajo G-BBDA AA5 Traveler	G-BBR	J Pa-23 Aztec
G-BBLS AA5 Traveler	G-AZRU Jet Ranger	G-AZF	J Cessna T310Q
13 G-AYER HS 125 G-AYFD D.62B Condor	G-AZFR Cessna 401B	G-AZL	Y Jodel D.120A
G-AYTG Cessna F.177	G-BAGW Cessna F.150	G-BBP	V Pa-31 Navajo P Cessna FRA.150
14 G-AYGC Cessna F.150	G-BACB Pa-34 Seneca G-BBMK Pa-31 Navajo	G-D1101	CODDIA 2222
G-BBES Jet Ranger 15 G-AZRU Jet Ranger	G-ATZN HS 125	G-AVK	Z Pa-23 Aztec
G-AVIW Viscount	G-AYMX Jet Ranger	G-BAY	U Cessna 310Q L Lear Jet
G-BBRJ Pa-23 Aztec	XS790 Andover N93434 Beaver (U6A)	r-DIM	T Tear oco
F-BPFO Baron 16 G-AYTG Cessna F.177	G-BAYU Cessna 310Q		
10 G-AITG CESSIA POLL			

- 5 -G-AYPH Cessna F.177 G-AYMX Jet Ranger G-BASL Pa-28 Cherokee G-BAMM Cherokee 235 G-BBIM Cessna 310Q G-APUW Auster J/5V G-AZRU Jet Ranger G-AYRD Twin Comanche G-ASFG Pa-23 Aztec G-BBJF Baron G-BBES Jet Ranger I-BOGI HS 125 G-BBUX Jet Ranger G-AWTX Cessna F.150 G-AYIM AA1 Yankee G-AYFI Twin Comanche G-ASWL Cessna F.172 G-BAUO Pa-23 Aztec G-BALU Pa-23 Aztec G-ASRO Twin Comanche G-AYPC Queen Air G-ATEW Twin Comanche G-AYTG Cessna F.177 G-BBES Jet Ranger G-BAVJ Pa-31 Navajo G-AYMX Jet Ranger G-BBEW Pa-23 Aztec G-AVUI Cessna F.150 G-ASRO Twin Comanche G-ASWJ Beagle B.206 G-ATHI Pa-28 Cherokee G-BBPV Pa-31 Navajo G-BABX King Air G-ATFK Twin Comanche G-AXUV Cessna F.172 G-AVNA Queen Air G-AWJW Jet Ranger G-BAZA HS 125 G-BAMM Cherokee 235 G-ATFK Twin Comanche G-AZLY Cessna F.150 G-AVPS Twin Comanche G-AVZT Pa-31 Navajo G-AVPF Twin Comanche G-BAVJ Pa-31 Navajo G-AYSB Twin Comanche G-AZFR Cessna 401 G-ARDY Nipper G-AYFJ Rallye Club G-BAVJ Pa-31 Navajo G-APVK Pa-23 Apache G-BBIT Hughes 269 G-AZFR Cessna 401 G-AVBZ Cessna F, 172 G-BAXG HS 125 G-BAFA AA5 Traveler G-AVWI Pa-28 Cherokee G-ASUH Cessna F.172 G-BARE Cessna 414 G-APVK Pa-23 Apache G-BBDA AA5 Traveler G-BASK Pa-23 Aztec -AZLY Cessna F. 150 F-BPFO Baron G-AVHW Twin Comanche G-AVNL Pa-23 Aztec G-AYNB Pa-31 Navajo G-AXUV Cessna F.172 G-BAVJ Pa-31 Navajo G-BAOP Cessna FRA 150

17 G-AVYL Pa-28 Cherokee

18 G-AWJA Cessna 182

G-AYTC Pa-23 Aztec G-BATP Pa-28 Cherokee

19 G-AYLM AA1 Yankee

G-BBRJ Pa-23 Aztec

G-AWDX Beagle Pup

G-AZZV Cessna F.172

G-AVCJ Beagle B.206

G-BBJZ Cessna F.172 13730 Iroquois

22 G-AWKF Twin Comanche

G-AZCK Beagle Pup

23 G-AWDX Beagle Pup

24 G-AVYL Cherokee

25 G-AVRG HS 125

G-AXVG HS 748

G-BAXV Cessna F.150 G-BBPX Pa-34 Seneca

G-AYMX Jet Ranger

G-BAHT Cessna F.172 G-BBSP Hughes 300

YXX Cessna F.172

G-AYDG Rallye Minerva PH-RPC Cessna FR.172

G-AYKL Cessna F.150

G-BAJO AA5 Traveler

G-BAVJ Pa-31 Navajo G-BBHA Turbo Commander

27 G-AVUN Twin Comanche

28 G-AZZV Cessna F.172

G-AVLY Jodel D.120

G-BAMM Cherokee 235

G-AZSN Cherokee Arrow

G-AWKF Twin Comanche

G-BAUO Pa-23 Aztec

G-BBPV Pa-31 Navajo

26 G-AYDE Pa-23 Aztec

20 G-AYTG Cessna F.177

G-BAGK Gazelle

21 G-AXXG BN2 Islander

G-AVSG Pa-28 Cherokee

G-BEEF Pa-28 Cherokee

Seaver N93434 on the 15th was in fact a U6A previously with the U.S. Army as 56-501 and was on delivery to Alaska, flown by an Icelandic ferry pilot. HS 125 G-AVRG on the 25th brought in Mr Heath and the HS 748 G-AXVG on the same day was filled with press men . First Gazelle to visit was G-BAGK on the 20th. The Y.T.V. Jet Ranger G-BBTV returned, after a respray, on the 22nd and noved into the hangar previously accupied by G-AWRI. 'RI is now living in the main hangar. Cessna F.337P G-BBKJ was delivered to East Midlands on the 13th by Northair. They also delivered the Aztec G-BRWM to Shobden on the 21st. A visitor to Northair on the 10th was Cessna FR172 N14493 c/n 0444. Cherokee SE-EON which was impounded by customs on arrival last month finally departed on the 10th, Cessna F.172 G-ASWL made one of its rare flights when it arrived from its base at Dalton on the 20th, it went to Y.L.A. and is believed to be in for c.of a.renewal. Cessna F.172 G-BAAS has completed repairs at Northair and went back to Grindale on the 23rd. Cessna F. 172 G-AWUY. which was recently rebuilt by Northair, once more returned by road on approx, the 26th after another accident at Paull. Rocket PH-RPC arrived for maintenance on the 24th and left for Amsterdam on the 28th.

G-BBPV Pa-31 Navajo

...1

G-BBXH Cessna FR172

22 G-BARE e sna 402 23 G-AYYD Sundowner

G-BBEB Cherokee Arrow G-BBVA Sikorsky S61N

Falke G-AYPY is no longer resident and reported sold in Cyprus.

THE SQUAIRCRAFT CAVALIER

by Dave Allan.

Among the most interesting of aircraft being built in Yorkshire, (apart from the Flying Flea of Yeadon Aeroplanes!) is the Squaircraft Cavalier.

One of these aeroplanes is under construction at the premises of Doncaster Sailplanes. The basic structure of the fuselage and wings, which in this case are one-piece from tip to tip, and do not fold, have been mated together.

The Cavalier has evolved from the GY-20 Minicab of 1946 design, which proved very popular with home constructors on the Continent, and the U.S.A.

Builders in America and Canada requested more power, higher performance, trigear, easier construction, etc., and the Minicab was thus re-designed to offer these desirable features. Many other features have been added to simplify construction, add comfort, visibility, safety, etc. The basic changes include;

1) Strengthened engine mounts and forward fuselage to take up to 135hp Lycomings

2) Strengthened and simplified spar for higher power, higher wing loadings and

3) Marine ply wing aileron, flapand tail ribs (100 hours labour saving compared

4) Convential or tricycle spring steel undercarriage for simplicity and economy.

5) Fixed windshield with forward hinged doors for durability and easy cockpit

6) Squared tailplane tips to avoid laminations and to match square wing tips.

7) Swept fin and rudder for "Sex Appeal".

The SA 102, Point 5 version, which is a modified and updated version of the basic SA 102 Cavalier, has proved to be the most popular. It's mods include tip tanks, and an optional 3-piece folding wing(13ft folded width), which needs no control disconnection or tip tank removal to operate. Construction Details

Simple four longeron box. Interior of cockpit plywood lined. Materials are 20mm x 20mm spruce, and 3mm five ply birch plywood. (Same used in our Flea!). The fuselage sides are made in a simple jig, and joined to their bulkheads and cross-members upside down, after which it is turned right side up to add the fin and superstructure.

Empennage (Tail Section to you!) Fin is a swept, two spar, 1.5mm ply covered structure, built integrally with the The stabilizer is of marine ply rib, and 1.5mm birch ply covering fuselage.

construction. pasically a mono spar wing, with built up box spar, plywood leading edge, light rear spar, Frieze ailerons, and a diagonal drag-load bearing spar.

The Cavalier offers tricycle or tailwheel udercarriage, which is unusual in a home-built aeroplane. The main u/c is 1 x5" truck spring, and the nose u/c is l'dia spring steel rod. Wheels are 500x5 or 600x6.

The canopy is a glass fibre mould, with cut-out doors in the side as on the

Piper "Cherokee".

Due to its clean lines, the Cavalier's performance is good, with a good short Flight Characteristics. field capability combined. The prototype and others have been flown from +6

All in all a very desirable aircraft for sport or touring and strong enough

for the odd loop or roll.

"How long does it take to build?" Naturally this depends on skill, experience, workshop facilities, etc., but the average is probably about 1000 to 2000 hours and one to two years of spare time work. There is nothing in the structure beyond the scope of the average builder.

It is possible to build the aircraft for about £500, but, if you were to go Cost

"first class" you could spend this on the engine alone, and a final cost would be between £600 and £800.

The prototype, CF-YIK, built by its designer Stan McLeod of K.& S.Aircraft Supply, 4623 Fortune Rd. S.E., Calgary 23, Alberta, Canada, first flew in 1971. Approximate increase in performance of the improved SA 102.5 (Tip tanks), is between 5% and 10% over the normal Cavalier. 5mph lower stall, shorter take off and landing, 7 to 10 mph higher cruise, 300ft. more rate of climb, more lateral stability, improved handling in rough air, etc., About six Cavaliers are under construction in the U.K. Plans have been submitted to P.F.A. engineering and full approval of the design and materials are available.

The covering on this two seater is Dacron cloth finished with polyurethane, for a very smooth finish. No stitching is needed. Ordinary linen and dope

can be used for those who like doing things the hard way.

Engine Options Continental.	C-85 - 85 hp C-200 - 100 hp	Lycoming.	0-234 - 108 hp 0-235 - 108 hp 0-2350 - 115 hp	est et
Franklin,	Sport 4A 125-130 hp		0-290 - 125 hp 0-290D2 -135 hp	
Empty Weight Gross Weight Fuel (internal Fuel (tip tanks Load Capacity Max. Speed (Str Max Speed (Dive Cruise Speed Stall Clean Stall Flaps Rate of Climb Aerofoil Stress	890 1500 1500 22 Im 28 Im 610 1 2. & level) 160 m 200 m 150 m 40 m 1000 : Root I Positis	p. gal pp. gal bs aph aph (T.A.S) bh (I.A.S.) bh (I.A.S.) fpm plus MACA 23015 ive 6+	85 Continental 800 lbs 1500 lbs 16 Imp . gal 28 Imp. gal 700 lbs. 140 mph 200 mph 140 mph (T.A.S.) 45 mph (I.A.S.) 40 mph (I.A.S.) 700 fpm plus Tip NACA 23010 Neg 3	
Stall and spin	nces at 600ft	and positive.	800-900 ft.	
Landing distant Wing Span (SA Wing Span (SA Overall length Height (tail with Height (tri-ge	102) 27 102.5 with tip tanks) heel) ar)	00 ft. ft. 27'8" 18'4" 5'5" 7'1"	600-800 ft	

Thanks to Doncaster Sailplanes for the information contained in this article.

FUEL SAVING DEPARTMENT

== TNICADN	ING DEPARTME NEWS As	promised last	month we have the latest information from the tes the list in YAN for September 1973.
kestrel c/n 1820	reg BGA 1889	f/f	owner and comments Mr. Eccles, delivered unfinished and it was finished by the owner.
1822 1825 1826 1827 1828 1829	CF-FEI BGA 1854 ZK-GHU ZS-GIH ZS-GII BGA 1856	22.08.73 20.09.73 30.09.73 18.10.73 23.10.73 14.11.73	York Soaring, Toronto. T.P. Docherty, Dundee. G. White, New Zealand. B. Cole, South Africa. B. Liegner, South Africa. G. Burton, flown by Mr. Burton in the 1974 Hearld Championships in Australia and sold there
1830 1831 1832	N??? ZS-BOB G-BBVC	05.12.73 05.12.73 17.12.73	H. Lobo, New Mexico USA, d/d unregistered. Bobby Clifford, South Africa. G. Barazzetti, Italy. Registered in UK till it was certified in Italy.

G.S. Neumann, Camebridge. 09.01.74 Kyokuto Boeki Kaishi Ltd., Japan, BGA 1855 1833 17.01.74 $J\Lambda$?? 1834 delivered unregistered EGA 1857 29.01.74 R. Chesters. D-0788 21.02.74 Hr. Otto von Gwinner, Switzerland
D. Zotov. Delivered incomplete for cust-1835 1836 omer to finish. 1837 R. Rutherford. BGA 1859 21.02.74

The above sixteen gliders show exports to eight different countries over a 1838 six month period. Business looks good for Slingsby Sailplanes.

TORVA SATIPLANES LIMITED Formed on 18th September 1969 at Scarborough to build the Torva TA Series 1. The company went into voluntary liquidation in January 1974. The aircraft produced were:

January 1	9140 1110 0	ALL OF CITY OF ALL	Piec togram	OR Assessment OPA Prince A Section 19
c/n	srs	reg	f/f	remarks DBR Sutton Bank 15.07.71, airframe
TA 1001	- 1 000	BGA 1641		ngod for tests.
002	2	BGA 1701	18.01.73 }	Bought by Yorkshire Sailplanes Ltd. in February 1974.
003	2	CONTRACTOR		- 12 2 hought the

YORKSHIRE SAILPLANES LTD. Formed in 1972, Yorkshire Sailplanes bought the Slingsby T53 design and with modifications built it as the YS-53 Sovereign. Further modifications produced the YS-55 Consort now in production. The prototype YS-53 was converted from a T-53 airframe c/n 1721 which was bought from Slingsby Sailplanes. Production is then as follows:

Sailpla	anes. Pro	duction :	is then	as	IOTIOM	YS-53	aln	1721	BGA	1787	f/f	21.07.73.	
YS-53	c/n 02	BGA 181	1			10-77		09		1891	prote		
YS-55	03	BGA 189	7			YS-55		10		1893			
10))	04	BGA 181	3					11		1894			
	05	BGA 189	0					12		1895			
	06	BGA 181	5					13		1896			
	07	BGA 189						14		1814			
	08	BGA 181	2					14				mnleted	
									77 7	la a a h	aan ac	77717) [63 [.63 []	

Slingsby T-53B c/n 1654 supplied to the Lakes Gliding Club has been completed

as a YS-53 Sovereign and registered as BGA 1898.

Yorkshire Sailplanes have also bought the Birmingham Guild BG-135 design, Three examples of this were recently registered but it is not known if they are to be Yorkshire Sailplane versions. For the record the three BG-135's are:-BGA 1920 c/n 4; BGA 1921 c/n 5; BGA 1922 c/n 6

We are grateful to Norman Ellison (our Kirkbymoorside Korrespondent) for most of the above glider news and also to Terry Sykes for compling it.

CREDITS T. Smith, K. Jordan, T. L ch, M. Everton, I. 'are you having one' Jagger, I. Sim, N. Ellison, A. Anderson, A. Barker, G. Abbott, D. Allan, Yorkshire Post, E. Atkinson, Yorkshire Evening Post, News of the World (!!!), Air Britain Digest/News, N. Rhys-Evans.

TIME TO REMEMBER

Had you gone to Leeming one day in 1941 you would probably have seen 10 Squadron Whitley V's including the following aircraft:

Whitley	A B THOTO	arie oric		Mary Mary 1 was 1 Total or	7 A O
70440	EV -C	Z9149	ZA-F	Z6941	ZA-O
Z9119 Z9161		Z6976	ZA-U		
201101					•

while a trip to Holme on Spalding Moor in 1943 would have produced Halifax V's of 76 Squadron:

01 10	5quauron.	LD Facility		TITOOA	T	LK922	L
TTO 16	יסד	DK167	Λ	EB204	11		
LK946	P	LL116		DK245	G	LK687	T
LK999	Λ						
TK926	C:	LK667	O	LK955	"		
	~						1 1 5

Has anyone any similar lists lying around from their early 'spotting' days, strictly for our senior readers. of course!

That March, Jones & Cribb of Leeds built D.H. 5's in 1917, serials were B4901-B5000 out of a total production of 550. DID YOU KNOW

```
February:
FLYOVERS
                                                          LBA 09.35 3500 Tees-side to Ternhill and return 15.02
  1 G-ATVV Cessna 172
                                                          POL 08.36 28000 From E.M.A., return POL 15.31.
                                                          POL 10.24 14000 Northbound, POL 17.11 17000 Sthbnd.
  4 G-BJCB HS 125
     N77TM Mitsubishi MU-2
                                                         POL 10.22 21000 Prestwick to Mildenhall.
  5 50217 C-141 Starlifter
                                                           LBA 13.55 5000 To Church Fenton.
POL 14.16 21000 Republic of Gabon, southbound.
  6 G-AYPC Queen Air
                                                           POL 18.36 33000 Northbound, POL 1935 37000 sthbnd.
      TR-LRX
       F-BRAL Lear Jet
                                                           LBA 08.44 13500 Edinburgh to E.M.A.
  7 G-BA00 Cessna 421
                                                           POL 08.49 10000 Northbound.
       41009 Convair C-131
                                                           POL 13.14 37000 Southbound.
                                                            14.30-14.50 Photography over Pontefract from and
       N516WC Jetstar
       G-BAGW Cessna 150
                                                                                                     to Sherburn.
                                                            POL 15.32 19000 French Air Force. Southbound.
       G-AWKC Hughes 300 Abm LBA 16.37 2000 Barton to Sherburn.

G-BBLI Shrike Commander POL 18.08 7000 Southbound.

G-AMPO Douglas Dc-3 POL 15.08 7000 From Newcastle, also 21.21.

G-AYPI Cessna 177 LBA 15.47 5500 Newcastle to Biggin Hill.
    8 G-AMPO Douglas Dc-3
        G-AYPI Cessna 177
POL 17.39 31000 To Prestwick.
POL 17.39 31000 To Prestwick.
        G-ASGI BAC Vc-10
POL 17.77 7000 Southbound.
POL 12.17 7000 Southbound.
  12 G-BAUR F-27 Friendship POL 09.57 13000 Stavanger to Swansea.
  11 G-AYGL Islander
                                                         12.55 4000 Photography over Castleford till 13.05.
17.00 7000 Seen at High Green, westbound.
        G-AZUG Traveler
        XV249 Nimrod
                                                             POL 16.09 41000 Southbound.
  CF-ROX Lear Jet
13 G-AXVG HS 748
        G-AXVG HS 748
PH-ILF Falcon 20
POL 00.10 10000 Northbound.
POL 09.09 7000 Inbound to Warton.
         N57057 Rockwell CommanderPOL 09.23 18000 Northbound.
        G-AZMM Diplomate Abm LBA 14.26 3000 Elstree to Sunderland.
OY-BBL Aztec OTT 18.00 7000 Eastbound.
   14 SP-LGC Tupolev Tu134
G-APBC Douglas Dc-3
15 F-BRAL Lear Jet

14.30 28000 Westbound, seen at High Green
POL 21.34 8000 Northbound.
POL 08.36 24000 From Castle Donnington.
   POL 08.36 24000 From Castle Donnington.

G-AYIO Cherokee
G-AYEC Douglas Dc-3

16 G-AZSU HS 748

17 33303 Douglas C-118

18 F-XCWE Atlantic
XX479 Jetstream
G-AXMY Twin Comanche
G-BIII BAC 1-11

POL 08.36 24000 From Castle Donnington.

POL 08.3
          G-BIII BAC 1-11 POL 16.18 24000 'Golf Bravo 1-11' Northbound.
    19 41009 Convair C-131 POL 08.36 12000 Northbound.
F-BSTI Navajo POL 17.17 11000 Southbound.
20 N506CC Citation POL 11.20 35000 To Prestwick.
    F-BUYI Falcon 20 OTT 13.17 29000 Trader Airways, eastbound.

G-AXBY Cessna 402 POL 16.28 7000 'Alidair 21' to East Midlands.

21 G-BBMK Navajo
G-AMYJ Douglas Dc-3 POL 13.17 7000 Southbound.

22 40639 C-141 Starlifter MIL 12 20 ZEO00 Wanthound.
     22 40639 C-141 Starlifter MIL 12.20 35000 Westbound.
23 24125 VC-135 OTT 08.39 35000 Via Milbrook.
                                                   Abm LBA 09.22 1500 Sherburn to Barton.
POL 12.16 31000 To Prestwick.
      25 G-BBIT Hughes 300
                                                          POL 15.55 11000 Newcastle to Le Bourget.
            G-AWNK Boeing 747
            F-BRSM Cessna 402
                                                       POL 16.33 23000 French Navy, southbound.
            G-APEU Vanguard POL 15.02 17000 To Heathrow.
            F-XCWF Atlantic
                          Hastings
HS 125

LBA 16.29 7000'FOF 02', Keflavic to Scampton.
POL 17.15 33000 Southbound.
                               High Green is about 2 miles north of Sheffield.
             F-BSSL HS 125
```