

Subject: Improvement of flying characteristics by means of modified flaperon mixer in the outboard wing.

Effectivity: All ASW 22 and ASW 22 M, serial numbers 22 001 thru 22 032 including.

Accomplishment: None; the modification according to this Technical Note is optional.

Reason: During flight performance tests it was noticed that the wing bending deflection is changing depending on flap setting and airspeed. It has been found out that the outboard flaperons are acting too much as flaps. Following this experience the mixer of this control circuit has been modified such that the actuation of the flap lever will result in less control displacement whereas sideways stick actuation will result in greater control displacement. At the same time the aileron control circuit has been modified such that the control deflections have more differential displacement.

- Instructions:
1. The upper wing surface must be opened according to the data given on drawing 220.51/52.S15 with the Correction Note TM-No. 1 of Oct.28, 1983.
 2. The parts P/N 220.41.0026
220.41.0027 and
220.41.0028
must be made according to their drawings and have to be exchanged against the parts
P/N 220.41.0015
220.41.0013 and
220.41.0012.
 3. After the installation of the new parts the glider must be rigged and the entire aileron / flap control deflections have to be checked in accordance with the new table on the ASW 22 Maintenance Manual page 37 with the Correction Note TM-No. 1 dated Oct.28, 1983. Normally only the outer flaperons will need adjustment.
 4. The wing sandwich must then be reclosed according to the Repair Manual page 18, figure 3 b, by observing the layer scheme of the upper wing sandwich. Only original material must be used. The postcure procedure of 12 hours at more than 60 °C must be carefully observed.

5. Page 37 of the ASW 22 Maintenance Manual has to be exchanged against the new page 37 with the Correction Note TM-No. 1 dated Oct. 28, 1983; this has to be documented on page 1 of the Maintenance Manual ("Index of corrections").

Material:

Use original material only; see ASW 22 layer scheme 220.51/52.S2BL2 (upper wing surface).

Weight and balance:

The increase of weight owing to this modification is only slight; the influence on the C.G. position can be neglected.

Notes:

1. The modification according to this TN-No. 1 is included into the series production as of s/n 22 033.
2. The work according to this TN-No. 1 must only be done by a licensed repair station or by the manufacturer.
3. The accomplishment of this modification must be documented in the glider's logbook and inspection papers by a licensed inspector.

Drawings:

For this TN-No. 1 the drawing 220.51/52.S15 has been corrected by Correction Note TN-No. 1 dated October 28, 1983.

The new drawing
 220.41.0026 will replace 220.41.0015,
 220.41.0027 " " 220.41.0013, and
 220.41.0028 " " 220.41.0012.

Poppenhausen, October 28, 1983

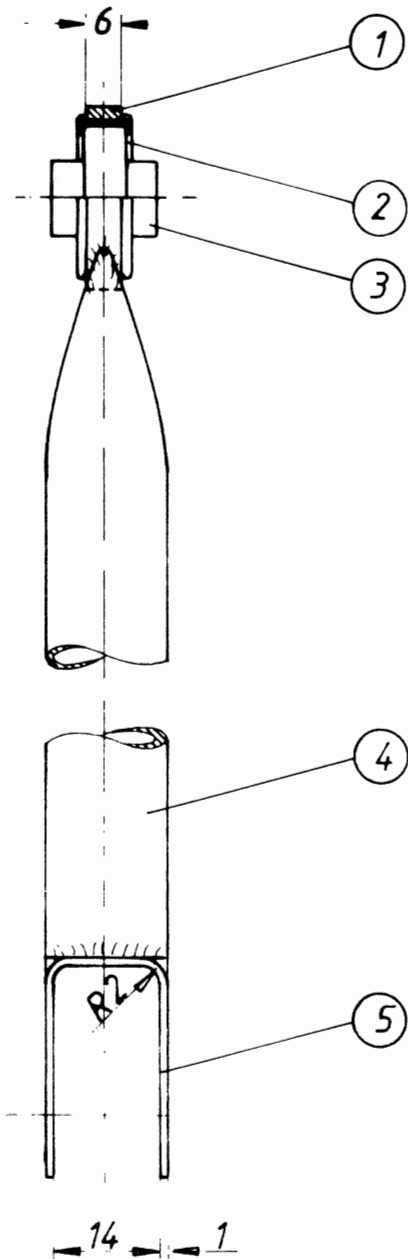
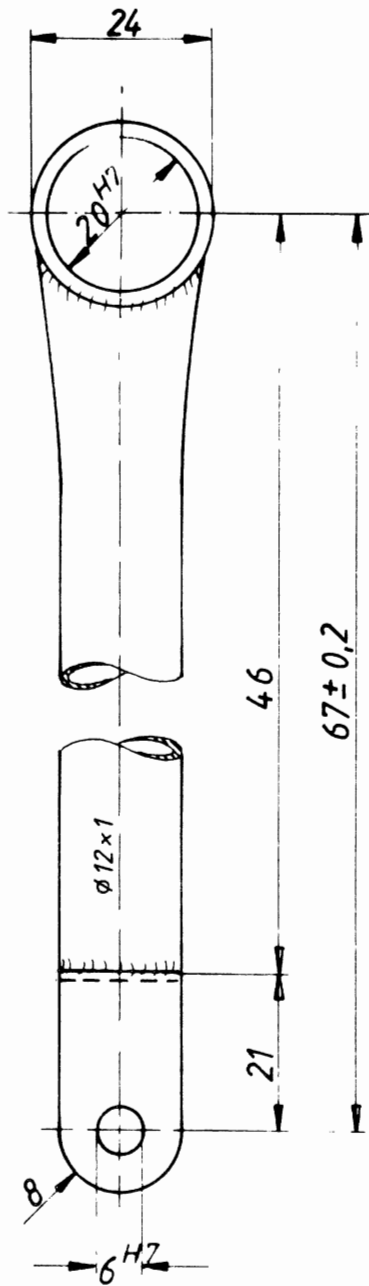
ALEXANDER SCHLEICHER
 Segelflugzeugbau

Gerhard Waibel

Gerhard Waibel.

The German original of this Technical Note has been approved by the LBA under the date of November 8, 1983, and has been signed by Mr. Schmaljohann.

The translation of this Technical Note has been done by best knowledge and judgement; in any case of doubt, the German original text is authoritative.

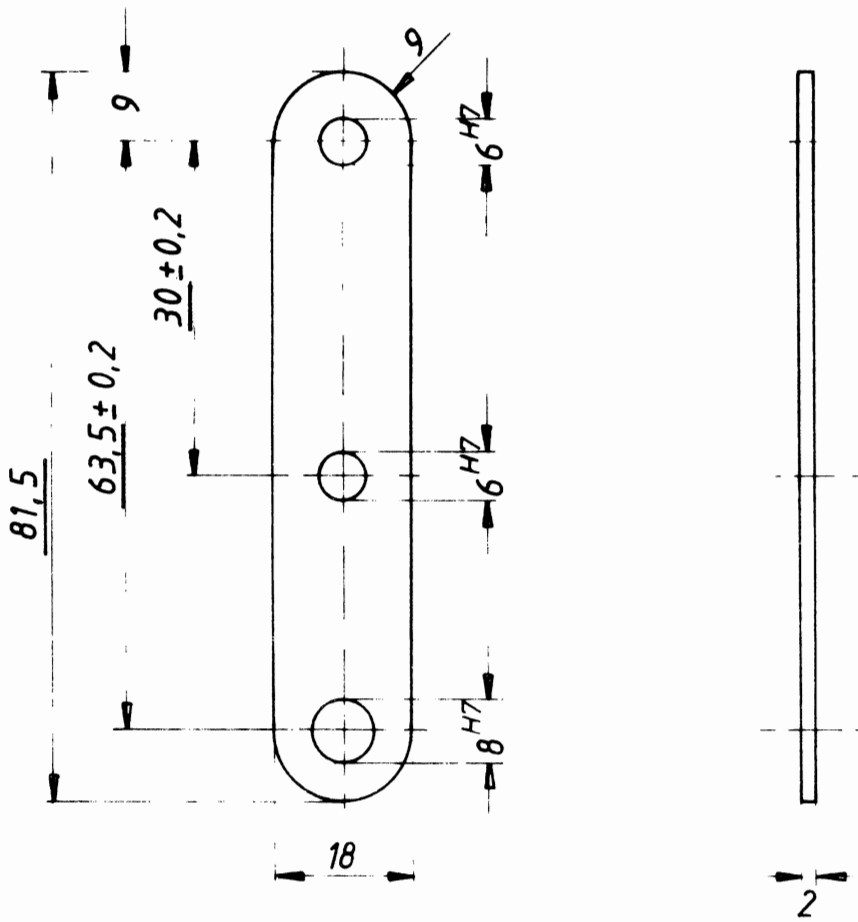


20 ^{H7}	+ 21
	0
6 ^{H7}	+ 12
	0

2	Standard-U-Bock	5	17214 4 od. 17734 4		
2	Rohr	4	St. 35 BK / BKW	Ø 12 x 1 - 44	
2	Pendelkugellager	3		14 C 6	
2	Nietbuchse	2	St. 35 BK / BKW	Ø 20 x 0,5 - 13	
2	Auge	1	St. 35 BK / BKW	Ø 24 x 3 - 6	
St.	Benennung	Lfd Nr.	Werkstoff	Rohmaße	Bemerkung

WNT99.402.0200

				Datum	Name	Typ	Benennung	Maßst
				Bearb	12.09.83	J4w	ASW22	1:1
				Gepfu			Stoßstange XI für	
				Norm			QR-Antrieb	
							TM-Nr. 1	
				A. Schleicher		Zeichnungsnummer L-351		Blatt
				Segelflugzeugbau		220.41.0026		Bl
				6416 Poppenhausen				
Zust	Anderung	Datum	Na	Urspr	Ers 1	220.41.0015	Ers d	

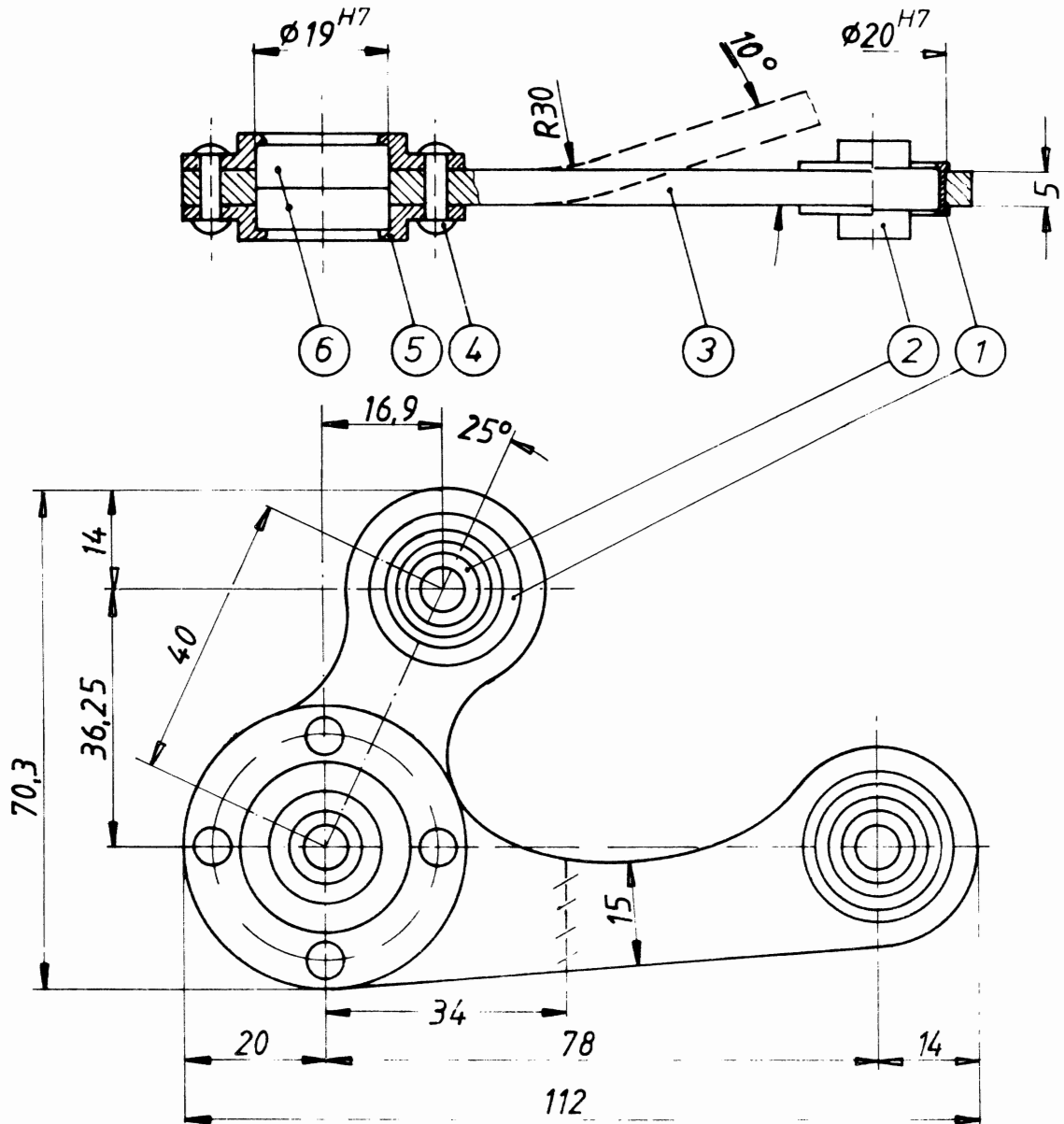


4 Stück

8 H7	+15
	0
6 H7	+12
	0

17214 4 od 17734 4 aus Stanzteil hergestellt

Zust	Anderung	Datum	Na	Urspr	Typ	Benennung	Maßst
					ASW 22	Lasche II für QR-Antrieb TM-Nr. 1	1 1
				A. Schleicher Segelflugzeugbau 6416 Poppenhausen	Zeichnungsnummer L-351 220.41.0027		Blatt B:
					17214 4 od 17734 4	ts d	

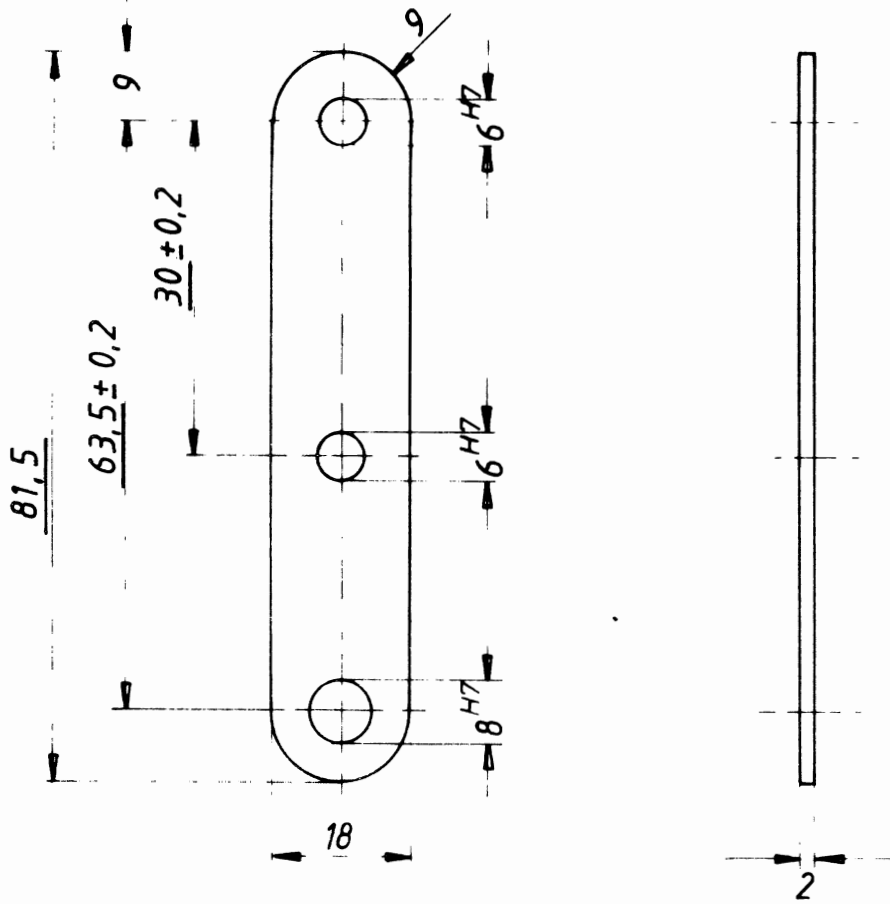


1 Stück spiegelbildlich biegen !

20 ^{H7}	+ 21
	0
19 ^{H7}	+ 21
	0

St	Benennung	Lfd. Nr.	Werkstoff	Rohmaße	Bemerkung
4	Rillenkugellager	6		626 A-Z	
4	kl. Flansch	5	3.1364.5	WNT99.304.0001	
8	Halbrundniet $\phi 3 \times 13,5$	4		DIN660 - A1	
2	Hebel	3	3.1364.5	114 x 72 x 5	
4	Pendelkugellager	2		14 C6	
4	Nietbuchse	1	St. 35 BK / BKW	$\phi 20 \times 0,5 - 11$	

				Datum	Name	Typ	Benennung	Maßst
				Bearb. 12.09.83	Juw	ASW 22	Umlenkhebel III für QR	1:1
				Gepfu.			TM-Nr. 1	
				Norm				
A. Schleicher						Zeichnungsnummer L -351		Blatt
Segelflugzeugbau						220.41.0028		Bl
6416 Poppenhausen						Ers 1 220.41.0012	Ers d	x
Zust.	Anderung	Datum	Na	Urspr				

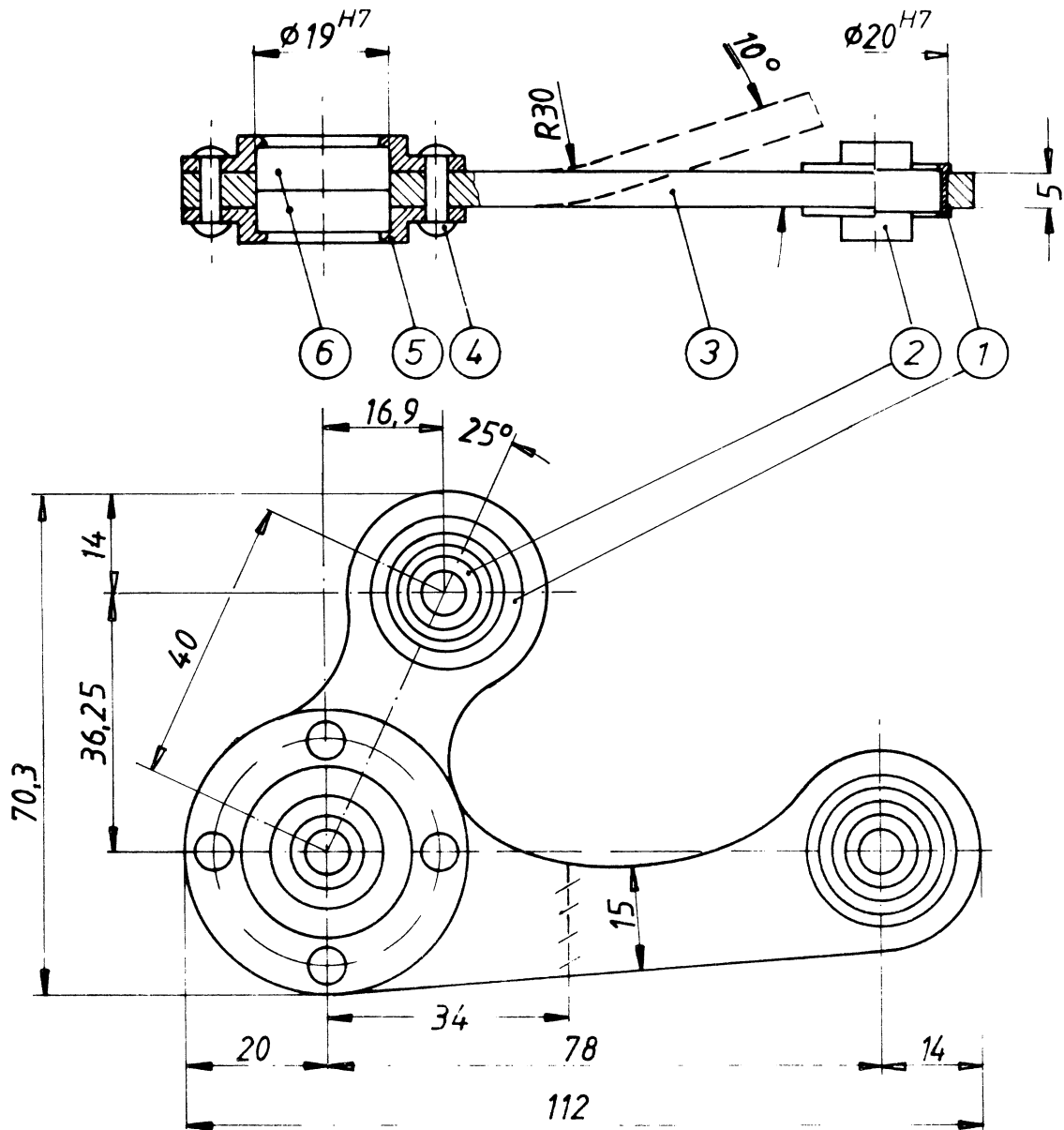


4 Stück

8 ^{H7}	+15
	0
6 ^{H7}	+12
	0

17214 4 od 17734 4 aus Stanzteil hergestellt

		Datum	Name	Typ	Benennung	Maßst
Bearb	12.09.83	Juw		ASW 22	Lasche II für QR-Antrieb TM-Nr. 1	1 1
Gepfu						
Norm						
A. Schleicher Segelflugzeugbau 6416 Poppenhausen			Zeichnungsnummer L-351 220.41.0027		Blatt	Bl
Zust	Änderung	Datum	No	Jrsp	Ers 1 220 41 0013	



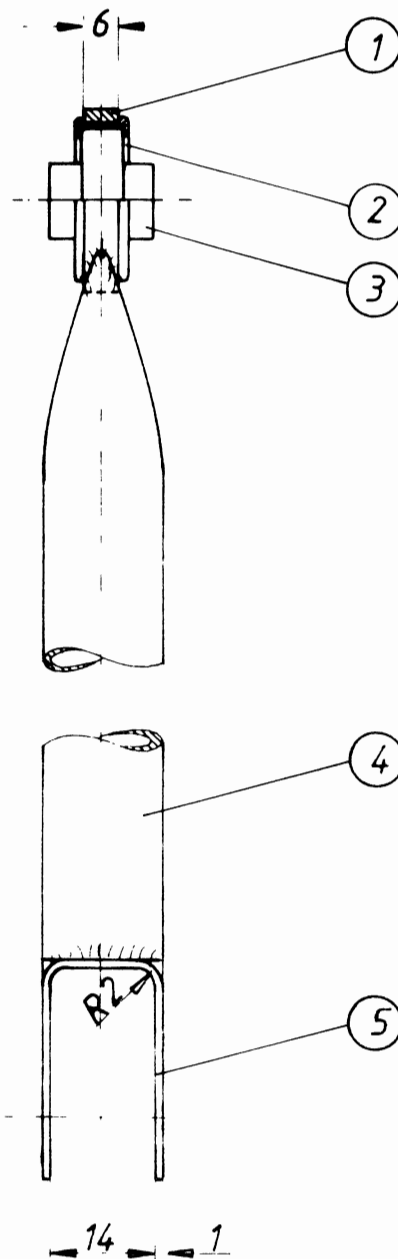
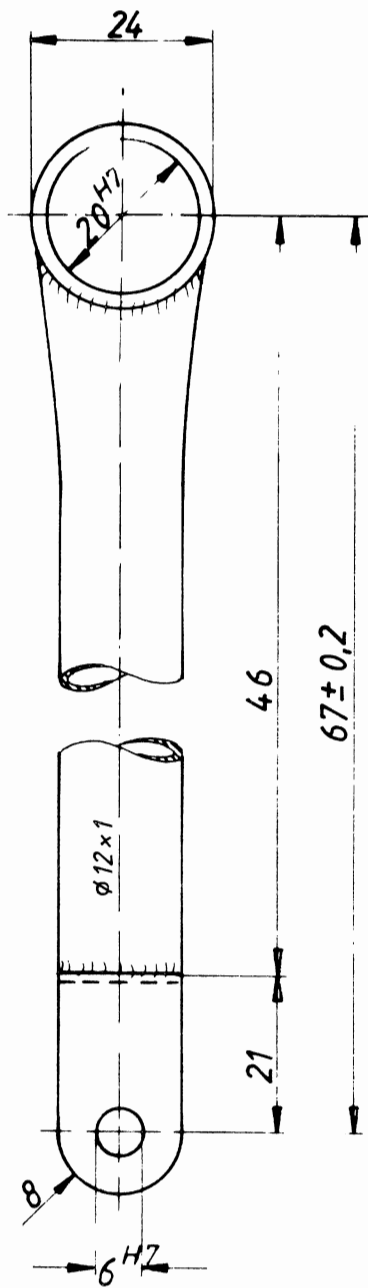
1 Stück spiegelbildlich biegen !

20 H7	+ 21
	0
19 H7	+ 21
	0

4	Rillenkugellager	6		626 A-Z	
4	kl. Flansch	5	3.1364.5	WNT99.304.0001	
8	Halbrundniet $\phi 3 \times 13,5$	4		DIN660-AI	
2	Hebel	3	3.1364.5	114 x 72 x 5	
4	Pendelkugellager	2		14 C6	
4	Nietbuchse	1	St. 35 BK/BKW	$\phi 20 \times 0,5 - 11$	

St.	Benennung	Lfd. Nr.	Werkstoff	Rohmaße	Bemerkung
			Datum	Name	Typ
			Bearb. 12.09.83	Juw	ASW 22
			Gepru		Benennung
			Norm		Umlenkhebel III für QR
					TM-Nr. 1
			A. Schleicher		Blatt
			Segelflugzeugbau		
			6416 Poppenhausen		Bl.
Zust.	Anderung	Num	Na	Urspr	Ers f 220.41.0072
					Ers d

Zeichnungsnummer	L -351
220.41.0028	



20 ^{H7}	+ 21
	0
6 ^{H7}	+ 12
	0

WNT99 402 0200

2	Standard-U-Bock	5	17214 L od. 17734 L
2	Rohr	4	St. 35 BK / BKW $\phi 12 \times 1 - 44$
2	Pendelkugellager	3	14 C 6
2	Nietbuchse	2	St 35 BK / BKW $\phi 20 \times 0,5 - 13$
2	Auge	1	St 35 BK / BKW $\phi 24 \times 3 - 6$

St.	Benennung	Lfd Nr	Werkstoff	Rohmaße	Bemerkung
			Datum	Name	Typ
			Bearb. 12.09.83	J4w	ASW22
			Gepfu		Benennung
			Norm		Stoßstange XI für QR-Antrieb
					TM-Nr. 1
			A. Schleicher		Blatt
			Segelflugzeugbau		1:1
			6416 Poppenhausen		BI
Zust	Anderung	Datum	Na	Urspr	Ers 1 220.41.0015
					Ers d