

House

W \$1.00 you have left side
#5 (send it back for Spruce)

EZ COSTS-David A. C. Orr © SEPTEMBER, 1984

Listings for
SQUADRON 1 CLUB

Current CP 24 through 41, Aircraft Spruce Catalogue

SF current June 84

Summer '84. Note that "AS37" is page 37 of the latest
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Spruce Catalogue. For 1984 Spruce's cloth, epoxy, cups
are up and blue and green foam and peel ply down. Brock
Catalogue August '84 (they have a long EZ by the chapter
catalogue avail.) and Task Res. August '84.

wicks

618 654 7447

Explanation of Codes:

AS = Aircraft Spruce: 714-870-7551
KB = Ken Brock: 714-898-4366
Rutan Aircraft: 805-824-2645
TR = Task Research: 805-525-4445/ 525-4545
"T" = total. (i.e. (2) things at \$10 will be
written "\$20.00T".
NL = Not listed.

SF = Sprouts Flight

AP = Air Parts 800 634-684
W = Wilco 316-943-9379

G = Goldberg prices
818-901-1993

WT = Weldtech (509) 967-8660

CHECKLIST OF UNUSUALS FROM AIRCRAFT SPRUCE:

(2) Ply 9 (skin protector) AS32: \$8.30T
(2) Epocleanse AS32: \$18.70T
(3) 2" dacron tape (Peel ply) AS20: \$14.70T
(4) 1" dacron tape (Peel ply) AS20: \$15.60T

Heat Guns
HS: \$89.50,
\$49.00, \$99.00

TR5: 46" wide peel ply:

5yds \$10.00
TR5: \$24.00
HS: \$69.50
Fedco \$72.00+
TR5: box masks \$20.80T

5 Minute epoxy AS16: \$21.00
Dremel #3801 AS25: \$87.70
Disposable respirator AS32: \$12.30
(10 Filters AS32: \$11.40T
(100) Polyethylene gloves AS32: \$5.50T
(100) Latex gloves AS32: \$16.50T
(12) Cloth gloves AS32: \$9.50T
(1pr) Butyl Gloves AS32: \$11.65
(1box) mixing Sticks AS29: \$10.40
2 lbs Flox AS19: \$3.70
2 lbs Glass bubbles AS19: \$12.60T
(200) 8oz cups AS29: \$19.30T
(200) 3oz cups AS29: \$7.70T
Single Edge blades, one box AS28: \$5.95
(24) 1" Brushes AS28: \$9.60T
(24) 2" Brushes AS28: \$14.40T
(1) Bondo AS19: \$15.30 Gal.
(1) #77 3M Spray Adhesive AS21: \$8.08 can
(1) Voltage control AS23: \$44.00
(Spool) Safety wire AS23: \$5.00
(1) Epoxy ratio Pump AS23: \$145.00

< suggest you
get #426(5)
#402(1)
#407(2)
#408(12)
#1228
as a minimum

TR5: \$18.50T

TR5: \$10.00
TR5: \$2.60
TR5: \$3.00

Get "ZAT" at model
store

(1) Boring Tool AS30: \$29.50 KB: \$29.50 (LE2625)
On tools: see CP 34/9 and 29/8.

Borrow one

TR5: \$150
Info on Pump from
Sticky Stuff, Michael
Engineering Co.
4997 So Crawford
MT. Pleasant, MI.
TR5: 25 clecos \$12.50T
Cleco pliers \$6.95

Drill tool: 50: Carman tool & abrasives
Brofield Ht - Paramount

Single Edge blades, one box AS28: \$5.95
 (24)1" Brushes AS28: \$9.60T
 (24)2" Brushes AS28: \$14.40T
 (1)Bondo AS19: \$15.30 Gal.
 (1)#77 3M Spray Adhesive AS21: \$8.08 can
 (1)Voltage control AS23: \$44.00
 better get homebuilders spcl: AS23:\$16.85
 (Spool)Safety wire (.41!) AS23: \$1.00
 (1)Epoxy ratio Pump AS23: \$145.00

 (1)Boring Tool AS30: \$29.50 KB: \$29.50(LE2625)
 On tools: see CP 34/9 and 29/8.
 A boring tool is a waste of hours- get the
 countersink instead - AS30: \$34.95
 if you can't borrow it.

model store.

Borrow one

TR5: \$150
 Info on Pump from
 Sticky Stuff, Michael
 Engineering Co.
 4997 So Crawford
 MT. Pleasant, MI.
 TR5: 25 clecos \$12.50T
 Cleco pliers \$6.95
 TR5: Fiberglass
 cutting Shears \$26.00

CHAPTER 2: BILL OF MATERIALS

Aircraft Spruce has listed the following prices on basic categories:

IF YOU BUY the SPUCE KIT COMPLETE - you get:

Epoxy	AS4: \$506.00T
Foam	AS4: \$910.00T
Fiberglass	AS4: \$823.50T BID
Filler Material	AS4: \$28.90T
Wood	AS4: \$58.00T
Aluminum extrusions	AS4: \$55.77T
Sheet Metal	AS4: \$24.02T
Metal Tubing and Rod	AS4: \$93.71T
Hardware	AS4: \$170.42T
Cable and Cable Hardware	AS4: \$45.15T
Plumbing and conduits	AS4: \$20.57T
Miscellaneous	AS4: \$274.30T
TOTAL:	AS: \$3038.74T
plus packing	AS?: \$35.00
	AS?: \$3073.74T

Squadron 1 can get
 about 30% off on
 epoxy, some savings
 on foam too.
 Squadron 2 may get
 bearings 30% off.

Rubber things

(kit does not include wheels/brakes/tires for approx \$445)

IF YOU DON'T BUY A COMPLETE KIT BUT BUY IN SECTIONS:

CHAPTER 3: EDUCATION

DESCRIPTION	COSTS
<u>Prefab parts:</u>	None
<u>Hardware:</u>	None
<u>Glass:</u>	
1.1 yd BID (\$3.52 worth)	AS9: (purchase 50yd roll \$165.00 or AS Practice kit)
0.1 yd UND (\$.32 worth)	AS9: (purchase 50yd roll \$162.50 or AS Practice Kit)

To be sure it is
 HEXEL, buy full rolls
 TR5: \$187.50

 TR5: \$217.50

Epoxy:

0.1 gallons (\$3.82 worth) AS16: (purchase 1.25gal=
\$48.50 or AS Kit)

Foam:

1 board ft urethane (tan) AS18: (purchase:
(\$.09worth) (1) 24 x 48 x 1/2" for \$3.78,
(1) 24 x 48 x 1" for \$5.41,
(1) 24 x 48 x 2" for \$10.96.

(OR Practice kit (\$49.95)

(Chap. 3 total: AS \$396.15 - not included in later totals)

See Cp 34/4 on unauthorized prefab parts.

The following totals for each chapter make these assumptions:

1. You don't buy more than the practice kit for chapter 3.
2. You buy Brock hardware (although Chapter 5 material is easy to build for considerable savings.
3. You only buy Task's nose gear, main gear and strakes.
4. If the item is not on Rutan's list and therefore not in the chapter totals, it is in brackets.

CHAPTER 4: FUSELAGE BULKHEADSDESCRIPTIONCOSTS

Prefab parts:

None

h

(TASK RESEARCH sells a Bulkhead kit TR1: \$733.00; see Task catalogue for individual bulkhead parts)

Hardware:

(You may consider hardware kit alone or an assorted hardware kit AS60)

6 AN509-10R10 Screws AS66: \$.48

Glass:

3 yds. UND (AS9: purchase 50yd roll:
\$162.50 if didn't in Chp 3.) 10

5 yds. BID (AS9: purchase 50yd roll:
\$165.00 if didn't in Chp 3.) 20

Epoxy:

0.5 gallons (AS16: 1.25 gal: \$48.50 25
if didn't buy in Chp 3.)

h

Buy 1 gallon each part from Dick Kreidel if didn't in Chapter 3 \$70?

Foam:

8 sq. ft of H45 tan CP34/7 AS18: purchase:
(1) 26 x 47 x 3/4": \$27.03 27

9 sq. ft of H250 CP34/7 AS18: purchase:
(2) 26 x 30 x 1/4: \$43.15 43

Wood:

1 pc 24" x 30" x 1/4" AS39: purchase: 20

5-ply birch plywood (\$17.40?)

or quarter sheet: (\$21.53?)

better to buy all wood for \$58.00T

Metals:

AS32: \$19.95*

Hardware: None

Glass:
6 yd BID will use 15.1 yd of 1st 50yd roll BID

Epoxy:
0.4 gallons will use 1.8 gal of 2.5 gal Buy 1 gallon each from Kreidel (\$70)

Foam:
16 sq. ft H45 tan 1 3/4" AS18: purchase:
(CP34/7) (2) 26 x 47 x 1 3/4": \$119.70
Chap 6 Total: AS ~~\$137.55~~ 139.65

CHAPTER 7: FUSELAGE EXTERIOR

DESCRIPTION	COSTS
Glass: 14 yd UND	will use 26.1 yd of 50yd roll UND
Epoxy: 0.85 gallons	AS16: 1.25 gal \$48.50 Used: 2.65
Chap 7 Total: AS \$48.50	

CHAPTER 8: ROLL OVER/SEAT BELTS

DESCRIPTION	COSTS
<u>Prefab Parts:</u>	
(1) Step (optional for you tall people)	KB43: \$5.30
(2) Seat Belt/Shoulder each seat:	KB43: \$64.95
(Harness assy.	AS: \$99.70T)
	<u>KB TOT: \$135.20</u>
<u>Hardware:</u>	
(6) AN525-416R16 Screws	AS67: \$1.08T
(2) AN509-416R18 Screws	AS67: \$.44T
(2) AN509-416R14 Screws	AS66: \$.32T
(4) AN4-5A bolts	AS60: \$.80T
(2) AN4-10A bolts	AS60: \$.50T
(16) AN960-416L Washers	AS69: \$.16T
(2) AN970-4 Washers	AS69: \$.12T
(16) MS21042-4 Nuts	AS64: \$3.68T
Glass: 2 yd BID	will use 17.1 yd of 50yd roll BID
Epoxy: .1 gallons	will have used 2.75 gal of 3.75 gal
Foam: 4 sq. ft H45 tan (CP 34/7)	AS18: Purchase: (1) 34 x 47 x 3/8" Tan: \$17.90
Metal: 8" of 1/8" x 1" x 1" 2024T3	AS54: \$4.60 per foot
Alum. Angle.	
Wood: Scraps of 1/4" plywood from firewall.	

for retractable step: WT:\$65.50
G:\$.64
G:\$.44

29.60T
AS Tot: ~~\$129.30T~~
Chap 8 Total: ~~\$264.50~~ 164.80

CHAPTER 9: MAIN GEAR/LANDING BRAKE

DESCRIPTION COSTS

Prefab Parts:

(Wheel fairings (pants)) (AS32: \$137.50)
(or \$164.20)

(Wheel fairing hardware) (AS32: \$16.80)
(or \$23.38)

MG1-L "S" glass main gear strut
1 set of Cleveland 500 x 5

wheels/brakes AS135: \$318 KB37: \$324.50T
(with chrome disks, KB37: \$410.00T)

(2) Goodyear tires, 3.40 x 5.

6 ply industrial rib and tube AS143: \$45.26T

(2) Goodyear tires, & tubes 5.00 x 5,

6 ply flight special IIs AS143: \$124.27T

see CP 26/5, 29/6 31/10 for tires \$60.00?

((2) McCreary Tubes & Tires 500 x 5 KB37: \$98.10T

(2) Axles for Cleveland 500 x 5

wheels (AX5A) KB37: \$58.90T

(Aircraft Spruce also lists main gear axles/nuts

and spacers for AS146: \$59.50T)*

(we've heard the axles have wrong radius at base)

(Aircraft Spruce lists Wheels/brakes/tires for:

AS135: \$343 to \$445T)

see CP 24/7, 27/8, 29/5 on wheels/brakes

TSO'd set 40-78B wheel

brake

For Cleveland 66-2
linings G: \$2.50ea
Airborne 310 linings
G: \$2.20

11.400 x 5 tire
SF: \$31.50 w/tube
(lighter 6 ply uses
5" wheels.)

Lamb tires/tubes:
HS \$63.00T

McCreary Airhawk 500

by 5 6ply W: \$40.44

McCreary Airtrack

5.00 x 5 6pl W: \$35.16

and Disc, 2 30-9B

and 2 500 x 5 4ply
tire w/tube W: \$350T
TSO'd 500 x 5 Cleve.
wheel & disc brake
W: \$150/pr

Wheel pants:

400x5: HS \$150

500x5: HS \$165

WT: \$27.00(polished)

(1) LB-12345 Weldment (landing
brake)

KB36: \$19.00

(Brock also sells Backup Rings-A484

KB37: \$14.00T)**

(Brock also sells Castle Nuts-J1.25 KB37: \$7.50T)**

(1) LB-6 Spacer

KB36: \$2.25

(1) LB-10 Aluminum arm

KB36: \$3.75

(1) LB-11 Spring Clip

KB36: \$1.40

(1) LB-131415 Handle assbly

KB36: \$19.50

((1) LB-14 bearing alone

KB36: \$3.75)

(2) LB-16 Spacers

KB36: \$2.80T

(2) LB-18 Brackets

KB36: \$5.50T

(1) LB-21 Treaded Rod

KB36: \$4.50

(3?) LB-22 Inserts

KB36: \$2.85T

(2) LB-20 Rod End Bearings)

KB36: \$18.00T

Tot: KB ~~\$472.95~~ 561.05

(This is a good time to mount a landing light
((1) LEZ-LL Landing Light Assembly KB43: \$34.00)

GE4509 landing lt
G: \$9.55

(Check plan pages for 4 big washers for landing gear mounting tubes.)

Hardware:

(4) AN3-7A Bolts	AS60: \$.72T	G: \$.60T
(5) AN4-5A Bolts	AS60: \$1.00T	G: \$.80T
(8) AN4-22A Bolts	AS60: \$3.04T	
(1) AN4-24A Bolts	AS60: \$.40	
(1) AN4-26A Bolts	AS60: \$.45	
(2) AN525-10R8 Screws	AS60: \$.16T	
(6) AN525-10R10 Screws	AS67: \$.54T	
(25) AN960-416L Washers	AS69: \$.25T	
(24) AN960-10L Washers	AS69: \$.24T	
(4) AN960-1016 Washers	AS69: \$.44T	
(12) MS21042-3 Nuts	AS64: \$2.28T	
(10) MS21042-4 Nuts	AS64: \$2.30T	
(2) AN316-4 Nuts	AS63: \$.24T	
(1) K1000-4 Nutplate	AS64: \$.25	
(2) 90° Nyloseal(?) #269P	AS82: \$1.96T?	
Brass Fitting		
(2) AN100-3 Thimbles	AS93: \$.22T	
(3) 18-1-C Nicopress sleeve	AS93: \$.39T	

Glass:

5 yd BID,	will use 22.1 yd/ 1st 50yd roll BID
10 yd UND	will use 36.1 yd/1st 50yd roll UND

Epoxy:

0.8 gallons	will use 3.55 gal of 3.75 gal- (purchase 1.25 gallons soon)	Buy 1 gallon resin from Kreidel \$35?
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Foam:

Urethane 24 x 24 x 1	use remainder of sheet ch 5
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Metal:

16 sq. inches of .063 2024T3	AS52: \$.87?
Aluminum	

Wood:

Scraps of 1/4" plywood

Misc:

(2) 10" Springs	AS30: \$4.20T
12' of 3/16" x .024 wall	
Nylaflo tubing	AS85: \$1.68
8" of MS20001-P6 hinge	AS55: \$23.90 for 36"
(use rest in chap. 18)	
4 ft of 1/16" 7 x 7 cable	AS95: \$.60
Phenolic 1/4" x 2" x 4"	AS58: \$2.24 (see ch 16 too)
(2) Heim F34-14 or	AS107: \$13.56T
Fafnir HM6 bearing	AS107: \$14.46T
With HM6 need bushing	AS107: \$2.00T
tot: AS: \$ 78.39	

Chap 9 Total: \$ 639.44

CHAPTER 10: CANARD

Plans

DESCRIPTION

COSTS

Prefab parts:

(2) CLT, Canard Lift tab (two parts)
 (2) NC-CLT NEW CANARD lift tabs

KB33: \$10.50T
 KB44: \$12.50T

TR1: \$830.00 for
 canard, wing and
 winglet foam
 \$40 crating chg.

Hardware:

(6) AN4-7A Bolts
 (6) AN960-416L Washers
 (6) K1000-4 Nutplates
 (12) AN426AD3-4 Rivets

AS60: \$1.38T
 AS69: \$.06T
 AS64: \$1.50T
 AS71: \$ 1.2 ?

G: \$1.26T

Glass:

17 yd UND

will use 43.1 yd of 1st 50yd
 roll UND

4 yd BID

will use 26.1 yd of 1st 50yd
 roll BID

Epoxy:

1 gallon

AS16: 1.25 gal \$48.50 used: 4.55

Buy 1 gallon each
 from Kreidel \$70?

Foam:

(1) 1 x 6 x 10 H100 (cp34/7) AS18: \$3.95
 (2) 7 x 14 x 41 styrofoam AS18: \$39.00T
 (2) 7 x 14 x 64 styrofoam AS18: \$59.60T
 (1) 1 x 6 x 10 R100 AS18: (check plans
 & cps, this may be a duplicate of the H100)

Metal:

9 sq inches of 1/8" 2024-T3 AS52: \$1.18 ?
 aluminum

Wood:

see cp35/6 on dowels

tot: AS \$ 155.29
 Chap 10 Total: \$165.79 (old Canard)
 167.79 (new Canard) ✓

CHAPTER 11: ELEVATORS

DESCRIPTION

COSTS

Prefab parts:OLD SYSTEM:

(7) CS2 Hinges with bushing
 (for replacement bushings)
 (9) CS3 Brackets
 (2) CS9 Plug
 (2) CS10 Lead weights
 (2) CS11 Lead weights
 (2) CS12 Bellcranks w/ bushings
 ((2) CS12-2 Bronze Bushing alone
 (1) PTB Belcrank

KB33: \$36.75T
 KB33: \$.40ea)
 KB33: \$17.10T
 KB34: \$8.20T
 KB34: \$9.50T
 KB34: \$7.50T
 KB34: \$7.50T
 KB34: \$.90T)
 KB43: \$5.25

old canard

KB TOT: ~~\$91.80~~ 91.80

NEW CANARD:

(5) NC-2 Hinge Inserts
 (5) NC-3 Hinges
 (2) NC-3A Hinges
 (1) NC-5A Pitch Trim Belcrank
 (2) NC-6 Plugs
 (2) NC-7 Hinge Jigs
 (1) NC-8L Hinge Pin 61"
 (1) NC-8R Hinge Pin 36"

KB44: \$49.75T
 KB44: \$18.75T
 KB44: \$9.00T
 KB44: \$29.50
 KB44: \$15.00T
 KB44: \$5.50T
 KB44: \$?
 KB44: \$?

(1) NC-12AL Left Control Arm	KB44: \$18.50
(1) NC-12Ar Right Control Arm	KB44: \$13.50
(2) NC-13 Spacer	KB44: \$.70T
(1) NCTT-L Left Torque Tube	KB44: \$37.50
(1) NCTT-R Right Torque Tube	KB44: \$25.50

Hardware: new canard tot: KB \$ 228.20

(2) AN3-6A Bolts	AS60: \$.26T	G: \$.24T
(2) AN3-15A Bolts	AS60: \$.46T	G: \$.44T
(4) AN3-10A Bolts	AS60: \$.80T	G: \$.60T
(9) AN509-10R7 Screws	AS66: \$.63T	
(4) AN509-10R14 Screws	AS66: \$.40T	
(7) AN525-10R10 Screws	AS67: \$.63T	
(22) AN960-10L Washers	AS69: \$.22T	
(28) MS21042-3 Nuts	AS64: \$5.32T	
(2) AN470AD 4-5 Rivets	AS71: ?	
(15) Pop Rivets	AS71: ? (see plans page 11-2 bottom right)	
Avex 1601-0410 or Cherry MSP43		

Glass:

3 yd UND will use 46.1yd of 1st 50yd roll

Epoxy:

0.1 Gallons will use 4.65 gal of 5.0 gal

Foam:

Part of two 7 x 14 x 64 blocks (page 10-1) AS18: \$59.60T

Check around for source of blue foam at 70% of AS prices.

Metal:

1 pc. 62" of 1 1/4" O.D. x AS53: \$9.90
 .035 wall 6061-T6 alum. tubing
 1 pc. 80" of 1 1/4" O.D. x AS53: \$13.86
 .035 wall 6061-T6 alum. tubing

tot AS \$ 92.08

Chap 11 Total \$ 320.28 new canard
 183.88 old canard

CHAPTER 12: CANARD INSTALLATION

DESCRIPTION	COSTS
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Prefab Parts:

(2) CNL Aluminum Bushings	KB33: \$4.60T
(2) CN2 Steel Bushings	KB33: \$2.60T

Hardware:

KB Tot: \$7.20

(12) AN3-20A Bolts	AS60: \$.50T
(2) AN4-13A Bolts	AS60: \$.60T
(2) AN960-416L Washers	AS69: \$.02T
(2) AN970-4 Washers	AS69: \$.12T
(2) K1000-4 Nut plates	AS64: \$.50T
(4) AN426AD3-3 Rivets	AS71: .04?

Glass:

BID scraps

Epoxy:

Minimal amount

tot: AS \$1.79

Chap 12 Total: \$ 8.98

CHAPTER 13: NOSE & NOSE GEAR

DESCRIPTION

COSTS

SEE: CP25/1 on Nosegear and wheel well

Prefab Parts:

(1) NG1-L "S" Glass strut

(1) SC Fiberglass strut cover AS: \$17.85*

(1) VENGR (NG50,51,53,54,55,56,57)

Worm Drive retraction assy.

includes belcrank component

KB38: \$144.00

((1) NG53 flat gear-you can reverse it one time

before replacing it after gear up landing) KB38: \$29.35)

((1) NG58 worm gear KB38: \$16.50)

((1) NG58,60 & pin worm gear assbly) KB38: \$18.50)

((1) NG60 shaft KB38: \$2.50)

(1) NG3 Bracket KB39: \$2.55

(1) NG4 Bracket KB39: \$2.00

((1) NG10A/NG0 Assembly-not needed if you are using the LST
spring assembly. (KB39: \$2.90 + 3.35)(1) NG6 Assembly (NG5,7,23,bushings
and spacers

KB39: \$20.00

((1) NG6-Casting only KB39: \$7.50)

(2) NG8 Plates KB39: \$6.90T

(Ken Brock also sells Inserts-NG9 KB39: \$3.35)

(2) NG14 Spacer KB39: \$5.00

(1) NG401A Castoring Nose wheel assy. KB38: \$149.95

If you don't buy NG401A: Subparts:

((1)NG401A-1 Nose wheel less axle, wheel KB38: \$129.00)

((1)NG401A-5 Axle Assby KB38: \$7.60)

((1) NG15A-R Swivel Block KB39: \$28.20)

or ((1) NG15A-C Casting only KB39: \$13.95)

((1) NG15-A1 Mounting Plate KB39: \$5.00)

((1) NG16C Casting only KB39: \$12.95)

((1) 20302 Wheel, tire, tube & bearings KB38: \$70.00)

((1) 20302-103 Wheel, bearings and races KB38: \$60.50)

((1) 20302-203 Wheel only KB38: \$44.00)

(If not purchasing NG401A, get from AS:

((1) Standard nosewheel and 2.80 x
2.50 x 4 tire & tube AS: \$45.35)

(2) LE 2026 Rudder pedals KB43: \$45.00T

(4) CS13 Bushings KB34: \$1.40T

(1) LST Spring Strut, nose gear KB40: \$71.95

((1) Spring only KB40: \$13.40)

((1) Replacement O-ring KB40: \$.50)

(1) NG59 flex coupling KB40: \$33.75

(1) NG61L 20" Shaft KB40: \$4.60

(1) NG63 Sleeve KB40: \$1.50

(1) NG67 Phenolic Block KB40: \$2.20

(1) NGA64 (64,65,68) V Crank Assby KB40: \$10.95

Hardware: KB TOT: \$501.75

(3) AN525-10R10 Screws AS67: \$.27T

(2) AN526-832-14 Screws AS67: \$.10T

(8) AN509-10R14 Screws AS67: \$.80T

(4) AN509-10R28 Screws AS67: \$1.00T

(10) AN509 8R8 Screws AS67: \$.60T

(3) AN4-10RA Bolts AS60: \$.75T

For Professional
looking pitot tube
WT:\$?

WT:\$43polished

(1) AN4-15A Bolts AS60: \$.35
 (2) AN4-41A Bolts AS60: \$2.32T
 (1) AN5-41A Bolt AS60: \$1.50
 (2) AN3-6A Bolts AS60: \$.26T
 (2) AN3-7A Bolts AS60: \$.36T
 (2) K1000-3 Nut plates AS64: \$.38T
 (10) K1000-8 Nut plates AS64: \$1.90T
 (2) AN364-832 Nuts AS64: \$.10T
 (19) MS21042-3 Nuts AS64: \$3.61T
 (6) MS21042-4 Nuts AS64: \$1.38T
 (1) AN365-524 Nut AS64: \$.09
 (2) AN316-6 Nuts AS63: \$.54T
 (14) AN960-10 Washers AS69: \$.14T
 (6) AN970-3 Washers AS69: \$.30T
 (7) AN970-4 Washers AS69: \$.42T
 (2) AN970-5 Washers AS69: \$.20T
 (4) AN426AD3-3 Rivets AS71: ?
 (20) AN426AD3-4 Rivets AS71: ?

G:\$.33

G:\$.24T

G:\$.30T

Glass:

7 yd BID will use 33.1yd of 1st 50yd
roll BID

Epoxy:

1/2 gallon AS16: 1.25 gal \$48.50 5.15 used

Foam:

10 sq. ft. 2" thick urethane
foam AS18:(2) 24 x 48 x 2": \$21.92T
(a few builders use blue foam as carving medium)
4.5 sq. ft. H250 have from chapter 4
(26 x 30 x 1/4")
(Good time to buy 2 part urethane:)
(2 gallons of X-40) (AS18:\$62.70)

Hastings plastic in
santa monica has a
better 2lb urethane
about \$49.00 for 2gal
TR5: \$\$17.00/Qt.

Metal:

2.5 x 3. x 1/8: 2024T3 alum. AS52: \$.80 ?
sheet
4 ft of 1/4" O.D.x.35 wall AS53: \$2.08
5052-0 aluminum
1 pc. .032 6061T6 AS?
alum. tube.

Misc:

4 ft of 3/8: OD x 1/4" ID AS85: \$3.16
tygon tubing
(1) 0715-153 tee AS83: \$.65
(2) 0700-153 adaptors AS83: \$.80T
(2) HM-6 rodends (RE4M6) AS107: \$16.46T with bushings
BE SURE TO ORDER BUSHING tot: AS: \$130.97
Chap 13 Total: \$632.72

CHAPTER 14 CENTER SECTION SPAR

DESCRIPTION

COSTS

Prefab Parts:

(2) SH1 Aluminum straps KB43: \$2.20T

Hardware:

(4) AN4-15A Bolts	AS60: \$1.40T	G:\$1.32T
(10) AN4-16A Bolts	AS60: \$3.50T	G:\$3.20T
(2) AN4-17A Bolts	AS60: \$.70T	G:\$.66T
(32) AN960-416L Washers	AS69: \$.32T	
(16) MS21042-4 Nuts	AS64: \$3.68T	

Glass:

AS9: buy 2nd 50 yd roll
UNI: \$162.50
18 yd UNI will use 11.lyd of 2nd roll
(reflects change in CP)
6 yd BID will use 38.lyd of 1st roll
50 yds 3" wide x .035 UND AS15: \$27.50 or
Tape thickness varies.
So make a trial layup, or (\$74 for 180 yd roll)
fill up the space

Epoxy:

2 gallons AS16: 1.25gal=\$48.50 7.15 used

Foam:

10 sq. ft. 1/4" H100 tan AS18: Purchase:
(2) 34 x 37 x 1/4": \$49.92T

Metal:

3ft of 1/8" x 1" x 1" alum. AS54: \$4.41
angle.
30" 1/8" x 2" 2024-T3 alum. AS54: \$6.63
bar
12" 1/4" x 2" 2024-T3 alum. AS54: \$4.41
bar

Wood:

(1 ft 1 x 1 spruce

AS36: \$.85)

AS tot: \$ 313.52

Chap 14 Tot: 315.72

(THIS IS A GOOD TIME TO GET THE ENGINE MOUNT, IF YOU DON'T
MIND BEING LIMITED TO A PARTICULAR VERSION OF AN ENGINE,
TO MAKE EXTRUSIONS PERFECT FIT (INSTEAD OF CH 23))

CHAPTER 15: FIREWALL AND ACCESSORIES

HINT: The next 2 1/2 chapters (15, first half 16 and
17-you do second half 16 during 19) go very quickly.
Get your supplies through canopy and order your canopy
now. If you want to have cowl on hand to fair the turtle
deck from canopy to cowl, order it now too.

DESCRIPTION

COSTS

Prefab Parts:

(2) CS15 Belcrank with bearing	KB34: \$16.50T
(4) CS71 Brackets	KB34: \$8.00T
(2) CS72 Brackets (4 pcs.)	KB34: \$10.00T
(2) CS75 Bushings	KB34: \$1.80T
(2) BA Brake arms	KB33: \$7.00T
(these BA unnecessary if mounting brakes forward)	
((2) T-18 Master Cylinder	KB37: \$107.00T)
((2) 227-6 Reservoir (not listed this cat. was \$14.90T)	
	tot: KB: \$43.30

(8) AN960-416 Washers	AS69: \$.08T
(5) AN970-3 Washers	AS69: \$.25T
(2) AN960-1016 Washers	AS69: \$.22T
(15) MS21042-3 Nuts	AS64: \$2.85T
(2) MS21042-4 Nuts	AS64: \$.46T
(2) AN310-4 Nuts	AS63: \$.26T
(2) AN316-4 Jam nuts(cs102)	AS63: \$.20T
(16) AN100-3 Thimbles	AS93: \$1.76T
(4) AN100-4 Thimbles	AS93: \$.48T
(10) AN470AD4-10 rivets	AS71: \$.30T
(4) 18-2-G Nicopress Sleeve	AS93: \$.60T
(1) AN393-19 Clevis pin	AS70: \$.18T
(1) AN416-1 Safety pin	AS70: \$.18T
(2) AN380-2-2 Cotter pin	AS70: \$.02T
(8) 1/8" Pop rivets	AS71: \$. ?

Glass:

2 yd BID	will use 40.1yd of 1st 50yd roll BID
----------	---

Epoxy:

0.1 Gallon	will use 7.25 gal of 7.5 gal (good time to get 1.25 gal)
------------	---

Foam:

3/8" thick type H45 tan PVC AS18: purchase: (1 left ch 8)
(1) 34 x 47 x 3/8": \$17.90

Metal:

15sq. inch .063 2024-T3 alum. AS52: \$7.50 ?
(1) 6ft 1/2" x .035 wall 2024-T3 AS53: \$7.23T
alum tubing
(2) 6 ft pcs 3/4" x .058 wall AS53: \$16.20T
6061-T6 alum tubing
3 ft. 5/8" x .049 wall 4130 AS45: \$6.06
steel tubing

Phenolic:

1/4" thick sheet 2" x 12" AS58: \$6.72

Don't need this
if you use new
metal bearings

Wood:

4" x 6" of 1/4" plywood (firewall (left from ch 4))

Misc:

(1) MS20271-B10 Universals AS115: \$25.08T
(2) HM-3 HEIM rodends AS107: \$10.70T
(2) HM-4 HEIM rodends AS105: \$11.90T
22 ft. of 3/32" dia. 7 x 19 AS95: \$6.82
stainless steel cable
14 ft of 3/16 x .025 Nylaflo AS85: \$1.96
tubing (33NSR)

WAG AERO has these
at about \$12.50!

(1) Boston FB 1013-8 Bronze AS115: \$2.90

AS tot: \$ 133.07
sub-Chap. tot: \$ 192.14

CHAPTER 16 PART II (don't need these til Chapter 19)

(8) CS1 Inserts	KB33: \$8.80T
(2) CS131 Spacers	KB35: \$2.80T
(2) CS128 Belcrank w/Bearings	KB35: \$16.50T
(4) CS127 Brackets	KB35: \$7.00T
(2) CS132L Belhorn	KB35: \$23.30T

CS132/133 WT: \$10.50

(2) CS131 Inserts KB35: \$7.90T

Hardware: KB tot: \$66.30

(8) AN3-7A Bolts	AS60: \$1.44T	G:\$1.20T
(8) AN3-11A Bolts	AS60: \$1.60T	G:\$1.23T
(12) AN3-5A Bolts	AS60: \$1.56T	G:\$1.32T
(2) AN3-16A Bolts	AS60: \$.50T	G:\$.50T
(74) AN960-10 Washers	AS69: \$.74T	
(10) AN970-3 Washers	AS69: \$.50T	
(2) AN960-1016 Washers	AS69: \$.22T	
(30) MS21042-3 Nuts	AS64: \$5.70T	
(12) AN100-3 Thimbles	AS93: \$1.44T	
(20) AN470AD4-10 rivets	AS71: \$.40T	
(8) 18-1-C Nicopress Sleeve	AS93: \$1.04T	
(8) 18-2-G Nicopress Sleeve	AS93: \$1.20T	
(4) AN393-9 Clevis pin	AS70: \$.60T	
(2) AN393-19 Clevis pin	AS70: \$.36T	
(6) AN416-1 Safety pin	AS70: \$1.08T	

Metal:

(1) 6ft 1/2" x .035 wall 2024-T3	AS53: \$8.28
(1) 6ft 3/4 x .058 wall 6061-T6 alum tube	AS53: \$8.10

Misc:

(2) Ms20271-B10 Universals	AS115: \$50.16T
(8) HM-3 Heim rod ends	AS107: \$42.80T
32 ft of 1/16" dia. 7 x7 stainless steel cable	AS95: \$4.80T
	AS sub-tot: \$133.02
	Sub-chapt. total: \$199.32

Good time to buy the
alternative suggested
by Squadron 1
(torrington
bearings).

CHAPTER 17: ROLL/PITCH TRIM SYSTEM

DESCRIPTION

COSTS

Prefab Parts:

(1) PTH Aluminum Handle	KB43: \$10.95
(1) RT1 Handle	KB43: \$6.65
(2) RT2 Steel bracket (L & R)	KB43: \$4.50T

Hardware:

tot: KB: \$22.10

(1) AN3-6 Bolt	AS60: \$.13	
(1) AN3-7 Bolt	AS60: \$.18	
(3) AN3-11A Bolts	AS60: \$.60T	G:\$.48T
(1) AN3-13A Bolt	AS60: \$.23T	G:\$.20T
(14) AN960-10 Washers	AS69: \$.14T	
(1) AN970-3 Washer	AS69: \$.05	
(4) MS21042-3 Nuts	AS64: \$.76T	
(2) AN310-3 Nuts	AS64: \$.24T	
(2) AN380-2-2 Cotter pins	AS70: \$.06T	
(8) AN100-3 Thimbles	AS93: \$.96T	
(4) 18-1-C Nicopress Sleeve	AS93: \$.52T	
(4) Phenolic Washers .5 OD x 3/16" I.D. x 1/16"	AS69: \$.96T	

Glass:

BID scraps

Epoxy:

Minimal

Wood:

1/4 plywood scraps (firewall) see ch 4

Misc:

(1) .35 x .05 steel springs 30" AS32: \$4.00
(cut to 6" and 2" long)

Refer to tension spring Long EZ

4ft 1/16" x 7 x 7 cable AS95: \$.60

(2) .35 x .06 compression AS95: \$2.40T
spring .5" long

AS tot: \$ 11.83

Chap 17 Total: \$ 33.93

for more positive
springs:
SF \$15.00T

CHAPTER 18: CANOPY

SEE: CP 31/1, 29/5 or 24/7 on canopies

Prefab Parts:

(1) Long-EZ Plexiglass canopy RAF: Clear \$199,
May have to get out of the Green \$229 Smoke or
mid-west. Bronze \$249

(1) C1-L Handle KB40:
(2) C2-L Arms "
(2) C3 Lugs "
(1) C4 Block "
(2) C5 Rods "
(2) C6 Tubes " \$36.95kit
(1) SC1 Catch KB40: \$5.95
(1) C21 Handle KB33: \$3.25
(6) CS13 Spacers KB34: \$2.10

tot: KB \$ 48.20

((1) FEGAS Spring Assembly AS55: \$24.50)
or ((1) Brock Throw over stay KB40: \$34.95)

Hardware:

(8) AN509-10R30 Screws	AS67: \$2.08T	
(8) AN509-10R10 Screws	AS67: \$.64T	
(3) AN525-10R10 Screws	AS67: \$.27T	
(8) AN525-10R12 Screws	AS67: \$.80T	
(1) AN525-10R16 Screws	AS67: \$.15	
(1) AN525-10R24 Screw	AS67: \$.20	
(1) AN3-10A bolts	AS60: \$.18	G: \$.15
(3) AN3-13A bolts	AS60: \$.69T	G: \$.60T
(3) AN3-7A bolts	AS60: \$.54T	G: \$.45T
(2) AN3-4A bolts	AS60: \$.26T	
(2) AN3-6A bolts	AS60: \$.26T	G: \$.24T
(1) AN3-12A bolt	AS60: \$.20	G: \$.18
(4) AN470AD3-7 Rivets	AS71: ?	
(53) AN960-10L Washers	AS69: \$.53T	
(6) AN970-3 Washers	AS69: \$.30T	
(35) MS21042-3 Nuts	AS64: \$6.65T	
(2) 18-1-C Sleeves	AS93: \$.26T	
(2) AN100-3 Thimbles	AS93: \$.22T	

Glass:

7 yds BID will use 47.1yd of 1st 50 yd
roll BID
AS9: Buy 2nd roll BID: \$165.00
2 yd. UND will use 13.1yd of 2nd 50yd

roll UND

Epoxy:

0.8 gallons

AS16: 1.25 gal \$48.50 8.05 used

Foam:

1" x 2" urethane (see plans pg2-3)

(should have from 5,9,13 & 14)

(good to use a 2 part 2 lb. urethane:)

(2 gallons of X-40 is good (AS18: \$62.70)

(If you didn't buy it for nose.)

2gal.

Misc:

16" MS20001-P6 Hinge (should have from ch.9)

(2) 4" long .35 x .05 steel AS20: \$1.80T

spring.

10" 32 guage steel piano wire AS55: 32GA (.089" dia), 40'
for \$2.25)

(50' reel of P-strip AS 32 & 90: \$20.50)

Metal:

1 1/2" x 5" x .032 2024-T3

Aluminum AS52: \$.25?

8" 1/8" x 1" x 1" 2024-T3 AS54: \$4.60/ft

Alum. angle

5" x 5" x .025 2024-T3 Alum. AS52: \$.51

Misc:

1ft 1/16 x 7 x 7 cable AS93: \$.15

3 pcs 5/16 O.D. x .028 wall AS3 : \$5.70T

fiberglass arrow stock

(If you are using a strut to attach the cross brace
behind the head reast, you only need 2 arrow stock)

16" of MS20001-P6 Hinge AS55: \$23.90

(save 1/2 for ch 20)

2 1/2" MS20257-P2 Hinge AS55: 36" for \$3.60

Hartwell H-5000-2 flush

latch AS266: \$4.50

1/2 gal of spraylat too plus AS56: \$17.70

Get a 3-4" brush if you don't have spray equip.

tot: AS \$ 292.69

Chap 18 Total: \$ 539.89 incl canopy

Hastings Plastic:
of Santa Monica
costs \$49 for

h
G:\$3.00

CHAPTER 19: WINGS, AILERONS/WING ATTACH

DESCRIPTION

COSTS

SEE CP 28/9 on Wing Tip Lights

((1) LE2625 Boring Tool KB43: \$29.50)

Prefab parts:

(12) LWA9 Bushings

KB43: \$51.00

(2) A2 Brackets

KB33: \$4.50

(4) A5 Brackets

KB33: \$8.00

tot: KB \$63.50

Hardware:

(12) AN960-816 Washers AS69: \$.60T

(10) AN960-816L Washers AS69: \$.50T

(14) AN960-10L Washers AS69: \$.14T

h
Don't waste time on it

(TASK RESEARCH has
canard, wing and
winglet foam for
TR:\$830.00T plus
crate:\$40.00)

(14) K1000-3 Nut plates AS63: \$2.66T
 (6) AN363-820 Nuts AS64: \$4.80T
 (28) AN426AD3-3 Rivets AS70: ,28 ?
 (14) AN525-10R8 Screws AS67: \$1.12T

Glass:

70 yds. 3" wide x
 .035 UND tape

AS15: purchased ch 14
 (180yd \$74)
 Buy 3rd 50 yd roll UND
 (You should have two on
 hand; according to plan
 you will have 15 yds left
 over however)

56 yds UND

AS9: \$162.50
 will use 19.1yd of 3rd 50yd
 roll UND
 will use 6.1yd of 2nd 50yd
 roll BID

9 yds BID

Foam:

(10) 7 x 14 x 64 styrofoam
 blocks
 (4) 7 x 14 x 41 styrofoam
 blocks

AS18: (6) \$298.80 (should have
 (4) partially used left)
 AS18: (2) \$39.00 (should have
 (2) partially used left)

SQ 1 has a source
 for blue foam at
 about 70% of cost
 of Aircraft Spruce

Epoxy:

4 gallons

AS16: (3) 1.25 gal \$145.50 12.05
 used of 12.75 tot.

Metal:

3"x10" .016 2024-T3 Alum.
 24" of 1/8" x 2" 2024-T3
 Aluminum bar
 12" of 1/4" x 2" 2024-T3
 Aluminum bar
 18" of 3/4" x .058 6061-T6
 alum tube

AS52: \$.60?
 AS54: \$5.34
 AS54: \$4.41
 AS53: \$2.05

Misc:

3ft. of MS20001-P6 hinge
 4 pcs 3ft x 3/8 dia.
 cold rolled steel
 25ft 3/16 O.D. x .025 wall
 Nylaflo tubing

should have 2nd half ch 18
 AS47: \$11.88T
 AS85: \$3.50

For teflon tube to
 limit hinge wear:
 G: \$.30/ft.

tot: AS: \$683.68

Chap 19 Total: \$747.18

CHAPTER 20: WINGLETS/RUDDERS

(special note: * delete item if building new high
 performance rudders)

Be sure to have an
 antenna ready-i.e.
 Radio Sys Tech.RST857
 prewired \$.25

DESCRIPTION

COSTS

PURCHASE RUTAN FULL RUDDER PLANS \$18.50 (CP39/1)

Prefab Parts:

(2) CS301 Steel Belhorn

KB35: \$4.25 Left & Right

Hardware:

tot: KB \$8.50

(10) AN525-10R8 Screws

AS67: \$.80T

(6) AN960-10L Washer s

AS69: \$.06T

916-272-2203 could
 also order Nav ant.
 now \$15.

Task has kit-

see above

(4) MS21042-3 Nuts AS64: \$.76T
 (6) K1000-3 Nut plates AS63: \$1.14T
Glass:
 10 yd UND will use 29.1 yd 3rd 50yd roll
 6 yd BID will use 12.1 yd 2nd 50yd roll
Epoxy:
 11 gallon AS16: 1.25 gal \$48.50 13.05 used
Metal:
 10" 1" x .035 wall 6061-T6 AS53: \$1.24
 Alum tube
 (2) 4 1/2" long .35 x .05 steel AS30: \$1.80T
 spring
 10" 3/32" steel piano wire AS55:? (should have for ch 18-AS:
 326A (.089" dia) 46' for \$2.25) ~~←~~
 tot: AS \$ 56.55
 Chap 20 Total: \$ 65.05

SPECIAL PURCHASES: IF YOU PUT ON HIGH PERFORMANCE RUDDERS

(1) Replace hinge with 30" MS20001P5 AS55: \$23.42T
 (8) Additional K1000-3Nut plates AS64: \$1.56T
 (28) Pop rivets-Cherry MSC-32 AS71: \$4.48T
 (24) Pop rivets-AVEX16-04-0412 AS71: \$2.40T
 or Cherry BSC-44 (AS71: \$1.44T)
 (8) Additional AN525-10R8 Screws AS67: \$.64T
 (2) AN970-3 Washers AS69: \$.02T
 (12) Additional AN960-10L Washers AS69: \$.12T
 Pour in Place

DELETE FROM Chapter 20:

AN426 AD3-3 Rivets and hinge

AS tot: 32.64
 or \$ if didn't buy hinge

CHAPTER 21: STRAKES - FUEL/BAGGAGE

DESCRIPTION

COSTS

Prefab Parts:

(2) SB Glass sump blisters	AS32: \$40.30T	
(2) FT 18 fuel cap assembly	KB42: \$29.80T	SF: \$64T
((2) FT 18-5 O-rings	KB42: \$1.90T)	
((2)) T18-2 Flush gas caps	KB57: \$99.90)	
((1) AN822-6D fuel fitting	KB42: \$2.30)	
((1) AN910-2D Coupling	KB42: \$3.00)	
((1) AN911-2D Nipple	KB42: \$1.50)	
((1) EFP (Optional) Electric Fuel Pump 12v	KB41: \$34.95)	AC Fuel pump
((1) EFP-1 (Optional 24v Fuel Pump	KB41: \$67.00)	SF:\$79 & SF:\$35
((1) FP-476067 Bendix fuel pump	KB41: \$61.15)	ACFuel Pump for 0-235
		G:\$69.25
((2) VE18 Drain valve	KB42: \$9.20T)	SF:\$6.00, SF:\$9.50,
		and SF:\$11.50.
		Get a flush valves from
		Goldberg \$21.20?T
((1) VE108 Fuel Valve	KB42: 29.50)	104HD: SF:\$15.50
		108HD: SF:\$16.50
		CAV-110 G:\$3.60
		Recessed: G:\$10.00

KB42 29.80

TASK RESEARCH also sells a fuel baggage
 strake kit -16 pieces for TR1: \$984.00
 (same kit less rib and baffles TR1: \$884.00)
 (shipping box TR1: \$20.00)

For strake leading
 edges only: SF:\$375

Hardware: None

Glass

(16 yds UND you will use 45.1yd of
 3rd 50yd roll UND)
 11 yds BID you will use 23.1yd of
 2nd 50yd roll BID)

Epoxy:

(1.9 gallons AS16: 1.25 gal \$48.50)
 14.95 gal used of 15.25 tot

Foam:

(6.3 sheets 34 x 47 x 3/8 tan AS18: Purchase:
 (1 from ch 16)
 H45 (6) 34 x 47 x 3/8": \$107.40

Metal:

2 sq. in. 1/8" 2024-T3 AS52: \$.21? →
 aluminum
 26 ft 3/8" O.D. x .035 wall
 1100-0 alum. versatube AS53: \$.52/ft = \$13.52
 28 ft 1/4" O.D. x .035 wall (four vents not two)
 1100-0 alum. tube AS53: \$.36/ft = \$7.20

Note: Fuel system plumbing and hardware, including
 engine components, hose lengths, pressure gauge, etc.
 can vary depending on engine installation. See plans
 and order components to suit.

CONSIDER
 P. ROUT"S
 FUEL GUAGES

(tot: AS ~~206.53~~) 276.73

but if TASK strakes: Tot 306.53

CHAPTER 22: ELECTRICAL SYSTEM

DESCRIPTION COSTS

Note! Due to the various options, this bill of
 materials does not include electrical items.

(Aircraft Spruce Lists VRR Instruments)*

SEE CP 30/11 & 26/11 on alternators, 34/8 on
 batteries, 34/9 on Compucruise, 28/9 Turn
 Coordinators, 28/9 on wingtip lights.

Prefab Parts:

((1) LE2-LL Landing Light Assembly KB43: \$34.00)
 (if didn't purchase in Chapter 9)

OTHER UNOFFICIAL SOURCES:

Compuflight TR3: \$259.95) (with remote TR3: \$299.95)

Aire-Schence's Navcom RT553A: SF:\$1505 Navcom RT563A: SF:\$2047

Transponders: RT-887 SF:\$837, RT787 SF:\$767 COM: 720Cannel RT-551A: SF:\$1085

Micrologic ML5000A: SF:\$1395, ML5000A w/antenna: SF:\$1495

Telex Headsets: D-950: SF:\$112 AP:\$112.46 E-951: SF:\$129 AP:\$134.96

DBM-1010: SF:\$126 AP:\$127.46

Microphones: 66T: SF:\$48 100TRA: SF:\$48

Cloth helmets: 4 sizes: SF:\$25

David Clark Co. Headsets: H10-30: SF:\$135 AP:\$158 H10-40: SF:\$169 AP:\$195 Push

to talk buttons: C10-15:

SF:\$35 Helmets: J11-30: SF:\$349 Visors: Clear: SF:\$77.65 Gray: SF:\$83.95

Emergency Recon ELT: SF:\$210 extra battery: SF:\$27.95 see SF catalogue:

B & D Instruments Astronautics EDO Corp United Instruments

Hamilton Airpath see SF catalogue for 1.5" and 2.25" instruments

Compuflight Basic Computer SF:\$249.95 Remote Computer SF:\$279.95

Floscan Transducer: SF:\$42 Prestolite wire see SF catalogue

Wood circuit breakers SF:\$13.50ea.

B & C for different alternators see SF catalogue

D.Hoffman Cockpit light: SF:\$12.50ea

AP has many other instruments and radios.

Intrcom ICS 442 2 station: G:\$120.00

AV547 Antenna splitter (2NAV) G:\$24.75

AV571 wNAV & GS G:\$39.50 others for \$35.50 and \$42.50

DME Antenna G:\$23.50-R35.50

TXP Antenna G:\$23.50-35.50

NARCO ELT-10 G:\$246.50 Elt Battery: G:\$30.00 AP:\$?

Hobbs G:\$33-46.75

Datcon Hour: G:\$28.50-33.50

(Long EZ Panel Marking Set AS32: \$4.25)

When it comes to inst
panel or engine

CHAPTER 23: ENGINE INSTALLATION

supplies, Vista

DESCRIPTION

COSTS

SEE CP 34/9 on air filters, 33/6, 31/7 & 28/9 on
B & T Props, 34/8 & 28/8 on cowls, 26/2 on Engine,
31/5 on engine mounts, 31/8 on Exhaust,
25/2 on Fuel pump, 32/4 on magnetos, 31/5 on Oil
orifice, 24/4, 25/2, 26/6, 33/6 on Props, 30/5 on
prop extensions, 29/8 on Rolls Royce 0-240 engine,
32/4 on Slick mags, 32/5 on Spinners.

Aviation is cheaper
than Air.Spr. and
Dusty and Brenda
Rhodes more
knowledgeable
818-896-6442

Prefab Parts:

((1) BJX-1 Stainless steel Balljoint Exhaust
System for 0-235 only KB41: \$250.00)

Exhaust Headers: SF:\$265
w/heat muff: SF:\$300
Blo-Proof Exhaust Gaskets
Copper Lycoming: SF:\$7.20T
Copper Continental:
SF:\$6.00T
Airborne #160 gasket
G:\$4.00T
#1000 gasket G:\$17.60T
181M copper gaskets
G:\$.17
Spiral Lycoming:SF:\$16.00T
Spiral Continental:
SF:\$16.00T
Exhaust Nuts:
Continental(Brass):
SF:\$3.60T
Lycoming(Steel): \$2.00T

Slick mags:
 Continental: HS:\$181T
 Lycoming: SF:\$172.75T
 Neoprene Gasket material
 SF: 6.50 per foot.
 Nylon Cable ties:
 see SF catalogue
 Exhaust Springs:
 SF:\$1.00ea
 Anti-Seize compound:
 G:\$2.25
 Aero-Duct G:\$2.30-5.90/ft
 Air borne 300-1 Vacuum pump
 G: \$261.00

BELOW IS THE LIST OF PLATES AND EXTENSIONS-SEE BROCK
 PG 60 TO SEE WHICH SAE YOU WILL NEED.

((1) KM01068-1 SAE-1 Prop Crush Plate KB60: \$15.95)
 ((1) KM01068-2 SAE-2 Prop Crush Plate KB60: \$22.95)
 ((1) 50082 SAE-2 Prop Crush Plate KB60: \$75.00)

(See KB catalogue-tons of prop plate, Crush plate,
 prop extension sizes and prices.

The best deals on ext. &
 prop plates is: Rotor dyne
 1006 W. Oak Bur bank
 818-849-4782

Spark Plugs: AP:\$17.50
 to \$45.00

8" prop extension?
 SF:\$290.00

((1) Conti. 0-200 Engine mount KB41: \$150.00)
 ((1) LYC-0235 Engine mount (Conical) KB41: \$150.00)
 ((1) LYC-0235D Engine mount (Dynafoal)KB41: \$275.00)
 ((1) VECG Complete Control Group
 (Mixture, Throttle, Carb Heat) KB41: \$79.50)
 ((1) VETC Single Throttle etc control KB41: \$31.75)
 ((1 set replacement cable KB41: \$10.00
 ((1) VESPl Spinner KB41: \$200.00)

Ellison Throttle body
 injector: SF:\$1000-1300

Kevlar spinner cone:
 HS\$60.00
 KB kit said to need
 modification

Primer kit WT:\$72.45

((1) CCB Carb Cont. Bkt. KB41: \$18.50)
 ((1) 0701-162 Nylon Adapter KB42: \$.35)
 ((2) 0711-162 Nylon Elbow KB42: \$1.00T)
 ((1) 0715-20 Nylon Tee KB42: \$.50)
 ((2) VECH.25 1/4" hose clamp KB42: \$1.40T)
 ((4') 0585-165 Breather hose KB42: \$12.40)
 ((15') 0585-197 Fuel Line KB42: \$14.25)
 ((2) SP-5 Spacers KB42: \$4.50T)
 ((1) VECHVA Carb Heat Assy KB41: \$68.35)
 ((2) LL3 KB42: \$3.80T)
 ((2) LL4 KB42: \$3.50T)
 (1) Spinner Kit AS31: \$138.50
 (1) Carb Heat Box AS31: \$58.00
 (1) Air Filter AS31: \$8.44

Instead of the following see CP 26/5 on NACA Inlet

Naca inlet: SF:\$75.00
 pour foam for naca:
 SF:\$20.00

(1) CI - Cowl inlet AS32: \$32.10
 (1 ea) CCT and CCB - Continental
 cowl or AS32: \$327.00T

Glass: _____ will use 26.1 yd of
3 yd. BID second 50yd roll

Sensenich Props see
HS catalogue

will use 15.15 gal of 15.25
(may need 1.25 gal more \$48.50)

Note!: Due to variations with different engine models, the hardware and components are not listed. Consult Chapter 23 and Section II. Determine your specific needs, then order.

(6)AN 3-7A Bolts	AS60:\$1.04T
(2)AN3-14A Bolts	AS60:\$.46T
(2)AN4-12A Bolts	AS60:\$.40T
(4)AN4-13A Bolts	AS60:\$1.20T
(2)AN4-14A Bolts	AS60:\$.60T
(18)MS21042-3 Nuts	AS64:\$3.42T
(8)MS21042-4 Nuts	AS64:\$3.36T
(3)AN818-2D Nuts(if primer)	AS78:\$.76T
(6)AN818-6D Nuts	AS78:\$2.70T
(10)AN509-10R8 Screws	AS66:\$.70T
(2)AN111-4 Cable bushings	AS93:\$1.26T
(3)AN819-2D Sleeves(if primer)	AS78:\$1.62T
(6)AN819-6D Sleeves	AS78:\$2.28T
(2)AN822-2D Elbow(if primer)	AS79:\$6.46T
(4)AN822-6D Elbow	AS79:\$9.84T
(2)AN822-6-2D Elbow	AS79:\$7.33T
(2)AN822-6-6D Elbow(if oil cooler	AS79:\$9.84T
(4)AN823-6D Elbow	AS79:\$12.32T
(4) (1)AN816-2D Nipple(if primer	AS78:\$1.46T
(1)AN816-4D Nipple	AS78:\$1.08
(2)AN916-6D Nipple	AS81:\$18.46T
(1)AN910-1D Coupling	AS80:\$1.23
(1)AN912-1D Bushing	AS80:\$.92
(1)3600 x 4 Weather-Head Male	
Branch Tee	AS83:\$3.14
(2)AC #6470069 Adapters	AS122:\$21.18T
(2)Aer equip 491-4 Fittings	AS87:\$9.10T
(4)Aer equip 491-6 Fittings	AS87:\$23.60T
(8-if oil cooler used)	(AS87:\$47.20T)

33" Aeroquip 303-6 Hose AS86:\$10.98
 (84" if oil cooler used) (AS84:\$25.62)
 6" Aeroquip 303-4 Hose AS86:\$3.13
 (8) Blow proof exhaust gaskets (lyc) AS172:\$20.00T
 (8) MS35333-41 Lock Washers AS69:\$1.6T
 (8) Exhaust Manifold Nuts Std. 1410
 5/16 - Lyc. AS172:\$1.60T
 18"-3/8" O.D. x .035 wall
 4130N steel tube AS45:\$2.78?
 18"-3/4" O.D. x 1/8" wall Tygon
 plastic tube AS? :?
 6" -3/4" O.D. x .049" wall
 6061-T6 alum. tube. AS53:\$1.23
 8" -3/16" x 3/4" 2024T3 Alum Bar AS54:\$2.00?
 (24) Nylon ty-raps (6") TY-525M AS? : ?
 (24) Nylon ty-raps (12") TY-528M AS? : ?
 (1) tube high temp RTV (silicon)
 (red or silver) AS57:\$7.80

Electrical

(1) Micro switch type V3 AS? :?
 (or Radio Shack 275-1102)

BAFFLE MATERIAL:

5" of 1/8" x 1" x 1 1/2" 2024 T3
 Aluminum Angle AS54:\$6.20
 1pc. .025" 6061T6 30" x 48"
 Aluminum Sheet AS52:\$21.90
 1pc. 1/16" x 12" x 40" neoprene-
 asbestos AS90:\$21.00
 (200) Avex 1601-0410 pop rivets AS73:\$11.10T
 (200) AN960-4L flat washers AS69:\$3.00T
 (12) AN936-A416 Lock washer's AS69:\$3.6T
 (12) AN500-416-10 Baffle screws AS66:\$4.20T
 (2) AN931-6-16 Rubber Grommets AS91:\$7.4T
 48" of 2 1/2" dia. 'Scat'
 aeroduct AS87:\$23.12T
 12" of 2" dia. 'Scat'
 (for cabin heat) AS87:\$4.78
 12" of 1 1/2" dia 'Cat'
 (for cabin heat) AS87:2.76
 4 Stainless worm clamps #136
 (2 1/2" dia) AS ? : ?
 (2) #CS springs 1/2" long x .35: O.D.
 x .06" wire compression) AS30:\$2.40T?
 (2) Century #C-161 Springs AS? :?

DYNAFOCAL MOUNT:

(4) AN7-35A Bolts AS60:\$7.92T
 (4) AN363-720 Nuts AS64:\$3.00T
 (4) Steel Spacers AS? :?
 (8) AN960-716 Washers AS69:\$8.80T
 (8) Dynafocal Bushings (for 2 3/4" I.D.
 Retainer: AS174:\$15.36T

↳
 Dave Ronneberg is now
 manufacturing a baffle kit
 cut to standard lyc shape
 and either ready to construct
 or constructed

(Conical Mount only:

((4) AN6-43A Bolts	AS60:\$5.60T)
((4) AN960-616 Washers	AS69:\$.23T)
((4) Lyc #Std 610 Washers	AS174:\$5.40T
((4) AN363-624 Nuts	AS64:\$.96T)
((8 #71032 Rubber Bushings	AS174:\$13.60T)

Optional:

(1) Exxex Primer #K2404-1/8"	AS122:\$34.45
(1) Stewart-Warner Oil Cooler P/N 8406R	AS169:\$196

CHAPTER 24: COVERS/FAIRINGS/CONSOLES

DESCRIPTION	COSTS
<u>Prefab Parts:</u>	None
(PM801-A Plackard	KB58: \$3.95)
(Experimental Decal	KB58: \$3.00)
<u>Hardware:</u>	None
<u>Glass:</u>	
2 yds BID	will use 28.1yd/ 2nd 50yd roll BID
<u>Epoxy:</u>	
0.3 gallons	AS16: 1.25 gal \$48.50 15.45 used
<u>Foam:</u>	
2" x 24" x 30" Urethane	should have from ch 16, 21
.35 thick type R45 dark blue foam (see pg 2-3)	
<u>Metal:</u>	
5" x 7" x .025 2024-T3 Alum.	AS52: \$.90?
Chap 24 Total: AS \$49.40	

CHAPTER 25: FINISHING

DESCRIPTION	COSTS	West System finishing system Goujoun Bros. Bay City, Wisc. 517-684-6881 orders 517-684-7286 inquiries 2 kits plus 1 set of pumps plus shipping = \$120 Local source: Cal Custom 2814 W. Washington 821-6762 GAL Kit:\$61.60 Pumps:\$7.50 each Mirror-Glaze Polish G:\$3.80 Cleaner: G:\$3.80
<u>Sandpapers:</u>		
9" x 11" sheets, Silicon Carbide or Aluminum oxide types		
(50 sheets) Coarse - 36,40	AS29: 36=\$33.00T	
or 60 grit		
(100 sheets) Medium-100-grit	AS29: \$59.00T	
wet/dry		
(100 sheets) Fine-220 grit	AS29: \$43.00T	
wet/dry		
(100 sheets) Fine-320 grit	AS29: \$43.00T	
wet/dry		
<u>Filler materials:</u>		
<u>Epoxy and Micro (as required)</u>	?	
(6 quarts) feather fill	AS20: \$60.90T	
(with catalyst)		
<u>Primer:</u>		
(3 gallons) Dupont 100s, 70s	\$89.25T	
301ls laquer primer surfacer.		
<u>Zoletone</u>	AS21: \$28.65 gal	Zoletone (Factory store: MANN Bros.
(one tube) Spot putty.	NL	

2D05A¹⁵

(as req'd) Stitts micro putty* AS196: \$13.99 qt,
\$51.50 gal
(one tube) Silicone Bath tub calk NL
ULTRALITE AS19: \$14.75 a gal.

Sterling filler AS20: \$118.00 for 2 gal.
Acrylic laquer or Acrylic enamel NL
(Dupont)

* These materials are available through distributors,
the remainder are available locally in most areas through
auto parts suppliers.

Note! Due to the wide variance of preferences finishing
materials are not supplied with the basic kit.

757 N. La Brea LA
(213) 936-5168 at
\$23.90/gal or
Tumans, 1002 Santa
monica Blvd SMO
393-0546

Sq 2 has Zoletone
paint samples chips
to lend out.

Brake Fluid: 5606:
G: \$10.50 gal, \$3.80 qt

CHAPTER 26: UPHOLSTRY

DESCRIPTION	COSTS
Upholstry kit consists of:	AS30: \$248.00T
(2) Custom-fit suitcases	
(2) Custom-fit seat cushions	
(2) Custom head rests.	
Chap 26 Total: \$248T	

House

W \$1.00 you have
#5 Left side
(send it back for Spruce)

EZ COSTS-David A. C. Orr (C) SEPTEMBER, 1984

Listings for
SQUADRON 1 CLUB

Current CP 24 through 41, Aircraft Spruce Catalogue

SF current June 84

Summer '84. Note that "AS37" is page 37 of the latest
Note that "AS37" is page 37 of the latest Aircraft
Spruce Catalogue. For 1984 Spruce's cloth, epoxy, cups
are up and blue and green foam and peel ply down. Brock
Catalogue August '84 (they have a long EZ by the chapter
catalogue avail.) and Task Res. August '84.

wicks

618 654 7447

Explanation of Codes:

AS = Aircraft Spruce: 714-870-7551
KB = Ken Brock: 714-898-4366
Rutan Aircraft: 805-824-2645
TR = Task Research: 805-525-4445/ 525-4545
"T" = total. (i.e. (2) things at \$10 will be
written "\$20.00T".
NL = Not listed.

SF = Sprouts Flight

AP = Air Parts 800 634-684
W = Wilco 316-943-9379

G = Goldberg prices
818-901-1993

WT = Weldtech (509) 967-8660

CHECKLIST OF UNUSUALS FROM AIRCRAFT SPRUCE:

(2) Ply 9 (skin protector) AS32: \$8.30T
(2) Epocleanse AS32: \$18.70T
(3) 2" dacron tape (Peel ply) AS20: \$14.70T
(4) 1" dacron tape (Peel ply) AS20: \$15.60T

Heat Guns
HS: \$89.50,
\$49.00, \$99.00

TR5: 46" wide peel ply:

5yds \$10.00
TR5: \$24.00
HS: \$69.50
Fedco \$72.00+
TR5: box masks \$20.80T

5 Minute epoxy AS16: \$21.00
Dremel #3801 AS25: \$87.70
Disposable respirator AS32: \$12.30
(10 Filters AS32: \$11.40T
(100) Polyethylene gloves AS32: \$5.50T
(100) Latex gloves AS32: \$16.50T
(12) Cloth gloves AS32: \$9.50T
(1pr) Butyl Gloves AS32: \$11.65
(1box) mixing Sticks AS29: \$10.40
2 lbs Flox AS19: \$3.70
2 lbs Glass bubbles AS19: \$12.60T
(200) 8oz cups AS29: \$19.30T
(200) 3oz cups AS29: \$7.70T
Single Edge blades, one box AS28: \$5.95
(24) 1" Brushes AS28: \$9.60T
(24) 2" Brushes AS28: \$14.40T
(1) Bondo AS19: \$15.30 Gal.
(1) #77 3M Spray Adhesive AS21: \$8.08 can
(1) Voltage control AS23: \$44.00
(Spool) Safety wire AS23: \$5.00
(1) Epoxy ratio Pump AS23: \$145.00

Suggest you
get #426 (5)
#402 (1)
#407 (2)
#408 (12)
#1228
as a minimum

TR5: \$18.50T

TR5: \$10.00
TR5: \$2.60
TR5: \$3.00

Get "ZAT" at model
store

(1) Boring Tool AS30: \$29.50 KB: \$29.50 (LE2625)
On tools: see CP 34/9 and 29/8.

Borrow one

TR5: \$150
Info on Pump from
Sticky Stuff, Michael
Engineering Co.
4997 So Crawford
MT. Pleasant, MI.
TR5: 25 clecos \$12.50T
Cleco pliers \$6.95

Drill tool: 50: Carman tool & abrasives
Brofield Ht - Paramount

TR5: Fiberglass
cutting Shears \$26.00

CHAPTER 2: BILL OF MATERIALS

Aircraft Spruce has listed the following prices on basic categories:

IF YOU BUY the SPUCE KIT COMPLETE - you get:

Epoxy	AS3: \$506.00T	Squadron 1 can get
Foam	AS3: \$910.00T	about 30% off on
Fiberglass	AS3: \$823.50T	epoxy, some savings
Filler Material	AS3: \$28.90T	on foam too.
Wood	AS3: \$58.00T	Squadron 2 may get
Aluminum extrusions	AS3: \$55.77T	bearings 30% off.
Sheet Metal	AS3: \$24.02T	
Metal Tubing and Rod	AS3: \$93.71T	
Hardware	AS3: \$170.42T	
Cable and Cable Hardware	AS3: \$45.15T	
Plumbing and conduits	AS3: \$20.57T	
Wheels/Brakes/Tires	AS3: \$445.00T	
Miscellaneous	AS3: \$274.80T	
TOTAL:	AS: \$3455.84T	
plus packing	AS?: \$35.00	
	AS?: \$3490.84T	

IF YOU DON'T BUY A COMPLETE KIT BUT BUY IN SECTIONS:

CHAPTER 3: EDUCATION

DESCRIPTION	COSTS	
<u>Prefab parts:</u>	None	
<u>Hardware:</u>	None	
<u>Glass:</u>		
1.1 yd BID, (\$3.52 worth)	AS9: (purchase 50yd roll \$160.00 or AS Practice kit)	To be sure it is HEXEL, buy full rolls TR5: \$187.50
0.1 yd UND (\$.32 worth)	AS9: (purchase 50yd roll \$157.50 or AS Practice Kit)	TR5: \$217.50
<u>Epoxy:</u>		SQ1:
0.1 gallons (\$3.82 worth)	AS16: (purchase 1.25gal= \$48.50 or AS Kit)	Buy 1 gallon each part from Dick Kreidel: \$70.(?) or TR: \$47.50/kit
<u>Foam:</u>		
1 board ft urethane (tan) (\$0.09worth)	AS18: (purchase: (1) 24 x 48 x 1/2" for \$3.78, (1) 24 x 48 x 1" for \$5.41, (1) 24 x 48 x 2" for \$10.96.	
(OR Practice kit (\$49.95)		
	(Chap. 3 total: AS \$386.15 - not included in later totals)	
See Cp 34/4 on unauthorized prefab parts.		

The following totals for each chapter make these assumptions:

1. You don't buy more than the practice kit for chapter 3.
2. You buy Brock hardware (although Chapter 5 material is easy to build for considerable savings).
3. You only buy Task's nose gear, main gear and strakes.
4. If the item is not on Rutan's list and therefore not in the chapter totals, it is in brackets.

CHAPTER 4: FUSELAGE BULKHEADS

DESCRIPTION	COSTS
<u>Prefab parts:</u>	None

(TASK RESEARCH sells a Bulkhead kit TR1: \$733.00; see Task catalogue for individual bulkhead parts)

Hardware:

(You may consider hardware kit alone or an assorted hardware kit AS60)

6 AN509-10R10 Screws AS64: \$.48

Glass:

3 yds. UND (\$9.45 worth) (AS9: purchase 50yd roll: \$157.50 if didn't in Chp 3.)

5 yds. BID (\$16.00 worth) (AS9: purchase 50yd roll: \$160.00 if didn't in Chp 3.)

Epoxy:

0.5 gallons (\$19.10 worth) (AS16: 1.25 gal: \$48.50, if didn't buy in Chp 3.)

Buy 1 gallon each part from Dick Kreidel if didn't in Chapter 3 \$70?

Foam:

8 sq. ft of H45 tan CP34/7 AS18: purchase: (1) 26 x 47 x 3/4": \$27.03

9 sq. ft of H250 CP34/7 AS18: purchase: (2) 26 x 30 x 1/4: \$43.15

Wood:

1 pc 24" x 30" x 1/4" AS37: purchase:

5-ply birch plywood (\$21.53)

or quarter sheet: (\$39.15)

better to buy all wood for \$58.00T

Metals:

(Suggest you wait for Ch 15)

(1 pc 24" x 30" x .016 2024T3 AS50: \$11.60)

(Misc: (Suggest you wait for Chapter 15)

(24" x 30" 970-F .040 thick AS30: \$3.75)

fiberfrax)

(bracketed itemes not in-

cluded in totals) Ch 4 Total: AS: \$494.66

CHAPTER 5: FUSELAGE SIDES

DESCRIPTION

COSTS

Prefab Parts:

(2) LMGA Assembly (see "Metal" below)

KB:

LMGB2 aft mount

\$80.00set

LMGB1 fore mount

\$45.00set

LMGB-B bushings

\$13.00set

LMGA tubes

\$23.90set

KB Tot: \$161.90

Hardware:

(2) AN6-80A bolts

AS58: \$9.80T

(16) AN4-16A bolts

AS58: \$5.60T

(4) AN960-616 washers

AS67: \$.12T

(32) AN960-416L Washers

AS67: \$.32T

(16) MS21042-4 Nuts

AS62: \$3.68T

(2) An363-624 Nuts

AS62: \$.48T

Glass:

9 yds UND (\$28.35)

will use 12.1 yd of 50yd roll

3 yds BID (\$9.60)

will use 9.1 yd of 50yd roll

Epoxy:

0.8 gallons (\$30.55)

AS16: 1.25 gal: \$48.50 used:1.4

Buy 1 more gallon

resin from Kreidel
\$35(?)

Foam:

32 sq. ft. 3/4" H45

AS18: purchase:

(CP34/7)

(4) 26 x 47 x 3/4" tan \$108.12T

3 sq. ft. 1" thick urethane

AS18: purchase:

foam, green

(1) 24 x 48 x 1": \$5.41

Wood: (If you didn't buy whole set in Chapter 4)

(3 pcs 104" long 0.7 x 1"

AS36: (3) 3/4 x 1 x 104:

spruce longerons

\$17.55T)

(5 pcs 60" of 0.4 x 0.7

AS36: (5) 1/2 x 3/4 x 60:

spruce stiffener

\$9.75T)

(2 pcs 105: of 0.7" x 0.7"

AS36: (2) 3/4 x 3/4 x 105:

triangle spruce

\$9.45T)

(1 pc 48" of 0.7" x 0.7"

AS36: (1) 3/4 x 3/4 x 48:

triangle spruce

\$4.32T)

Metal:

24" 1/4" x 2" x 2" 6061-T6

AS52: \$7.08T

extruded angle

AS Tot: \$188.79

Chap. 5 Total: \$350.69

(Check around,
many have purchased
KB kits and this
metal for the same
part)

CHAPTER 6: FUSELAGE ASSEMBLY

DESCRIPTION

COSTS

Prefab Parts:

NB - nose wheel box cover

AS32: \$17.85*

ordered 3-21-from wicks

Hardware:

None

Glass:

6 yd BID (\$19.20 worth)

will use 15.1 yd of 1st 50yd

roll BID

Epoxy:

0.4 gallons (\$15.28 worth)

will use 1.8 gal of 2.5 gal

Buy 1 gallon each

Foam:

16 sq. ft H45 tan 1 3/4"
(CP34/7)

AS18: purchase:

(2) 26 x 47 x 1 3/4": \$119.70

Chap 6 Total: AS \$137.55

from Kreidel (\$70)

CHAPTER 7: FUSELAGE EXTERIOR

DESCRIPTION

COSTS

Glass:

14 yd UND (\$40.60 worth)

will use 26.1 yd of 50yd
roll UND

Epoxy:

0.85 gallons (\$32.46 worth) AS16: 1.25 gal \$48.50 Used: 2.65

Chap 7 Total: AS \$48.50

CHAPTER 8: ROLL OVER/SEAT BELTS

DESCRIPTION

COSTS

Prefab Parts:

(1) Step (optional for you tall people) KB: \$5.30

(2) Seat Belt/Shoulder

Harness assy.

(AS: \$80.50T)

((2) Seat Belt only 27.60)

KB: \$70.00T

KB TOT: \$75.30

Hardware:

(6) AN525-416R16 Screws

AS30: \$1.08T

(2) AN509-416R18 Screws

AS65: \$.44T

(2) AN509-416R14 Screws

AS64: \$.32T

(4) AN4-5A bolts

AS58: \$.80T

(2) AN4-10A bolts

AS58: \$.50T

(16) AN960-416L Washers

AS67: \$.16T

(2) AN970-4 Washers

AS67: \$.12T

(16) MS21042-4 Nuts

AS62: \$3.68T

Glass:

2 yd BID (\$6.40 worth)

will use 17.1 yd of 50yd
roll BID

Epoxy:

.1 gallons (\$3.82 worth)

will have used 2.75 gal
of 3.75 gal

Foam:

4 sq. ft H45 tan (CP 34/7)

AS18: Purchase:

(1) 34 x 47 x 3/8" Tan: \$17.90

Metal:

8" of 1/8" x 1" x 1" 2024T3 AS52: \$4.60 per foot

Alum. Angle.

Wood:

Scraps of 1/4" plywood from
firewall.

AS Tot: \$29.60T

Chap 8 Total: \$104.90T

~~See~~ Retractable Str.
WT: 865.50

G1: \$1.64

G1: \$1.44

CHAPTER 9: MAIN GEAR/LANDING BRAKE

DESCRIPTION	COSTS
<u>Prefab Parts:</u>	
(Wheel fairings (pants))	(AS32: \$131.75) (or \$155.27)
(Wheel fairing hardware)	(AS32: \$16.80) (or \$23.38)
MGI-L "S" glass main gear strut	TR1: \$344.00***
1 set of Cleveland 500 x 5 wheels/brakes	AS133: \$318 KB: \$324.50T
(2) Goodyear tires, 3.40 x 5, 6 ply industrial rib and tube	AS144: \$45.26T
(2) Goodyear tires, 5.00 x 5, 6 ply flight specials	AS144: \$145.06T
see CP 26/5, 29/6 31/10 for tires	\$60.00?
(2) Axles for Cleveland 500 x 5 wheels (AX5A)	KB1: \$58.90T
(Aircraft Spruce also lists main gear axles/nuts and spacers for	AS147: \$62.00T)*
(Aircraft Spruce lists Wheels/brakes/tires for:	AS133: 343.00 to 417T)
see CP 24/7, 27/8, 29/5 on wheels/brakes	

(1) LB-12345 Weldment (landing brake)	KB: \$29.00
(Brock also sells Backup Rings-A484	\$14.00-?)**
(Brock also sells Castle Nuts-J1.25 KB	\$7.50-?)**
(1) LB-6 Spacer	KB: \$2.25
(1) LB-10 Aluminum arm	KB: \$3.75
(1) LB-11 Spring Clip	KB: \$1.95
(1) LB-131415 Handle assbly	KB: \$19.50
((1) LB-14 bearing alone	KB: \$3.75)
(2) LB-16 Spacers	KB: \$2.80T
(2) LB-18 Brackets	KB: \$5.50T
(1) LB-21 Treaded Rod	KB: \$4.50
(2) LB-22 Inserts	KB: \$2.85T
(2) LB-20 Rod End Bearings)	KB: \$18.00T

Tot: KB \$473.50

(This is a good time to mount a landing light
(1) LEZ-LL Landing Light Assembly KB: \$34.00)
(Check plan pages for 4 big washers for landing gear
mounting tubes.)

Hardware:

(4) AN3-7A Bolts	AS58: \$.72T
(5) AN4-5A Bolts	AS58: \$1.00T
(8) AN4-22A Bolts	AS58: \$3.04T
(1) AN4-24A Bolts	AS58: \$.40
(1) AN4-26A Bolts	AS58: \$.45
(2) AN525-10R8 Screws	AS65: \$.16T
(6) AN525-10R10 Screws	AS65: \$.54T
(25) AN960-416L Washers	AS67: \$.25T
(24) AN960-10L Washers	AS67: \$.24T

G2 Cleveland 66-2 Lining
AIRBORNE 310 Lining
#22

McCreary AIR Hawk
5.00 x 5 6 ply 40.44
McCreary RTRAC
5.00 x 5 6 ply = \$135.16 ea

11.400 x 5 tire
HS: \$31.50 w/tube
(lighter 6 ply uses
5" wheels.)

Lamb tires/tubes:
HS\$63.00T

W: TSO'd set 40-78B wheel 2 ea
2 30-9B Brake
2 500x5 4 ply Tire & Tube
\$350T

Wheel pants:
400x5: HS\$150
500x5: HS\$165

W2 TSO'd
500x5 Cleveland
wheel & disc
brake \$150/pr
W2: \$27.00
(polished)

GE4509
G2 Landing Light
\$9.55

G1: \$60T
G1: \$80T
G1: \$17
G1: \$17
G1: \$17

(4) AN960-1016 Washers AS67: \$.44T
 (12) MS21042-3 Nuts AS62: \$2.28T
 (10) MS21042-4 Nuts AS62: \$2.30T
 (2) AN316-4 Nuts AS61: \$.24T
 (1) K1000-4 Nutplate AS62: \$.25
 (2) 90° Nyloseal(?) #269P AS80: \$1.96T
 Brass Fitting
 (2) AN100-3 Thimbles AS91: \$.22T
 (3) 18-1-C Nicopress sleeve AS91: \$.39T

Glass:

5 yd BID, (\$16.00 worth) will use 22.1 yd/ 1st 50yd
 roll BID
 10 yd UND (\$31.50 worth) will use 36.1 yd/1st 50yd
 roll UND

Epoxy:

0.8 gallons (\$30.55 worth) will use 3.55 gal of 3.75 gal- Buy 1 gallon resin
 (purchase 1.25 gallons soon) from Kreidel \$35?

Foam:

Urethane 24 x 24 x 1 use remainder of sheet ch 5

Metal:

16 sq. inches of .063 2024T3 AS50: \$.67?
 Aluminum

Wood:

Scraps of 1/4" plywood

Misc:

(2) 10" Springs AS30: \$4.20T
 12' of 3/16" x .024 wall
 Nylaflo tubing AS30: \$1.68
 8" of MS20001-P6 hinge AS53: \$23.90 for 36"
 (use rest in chap. 18)
 4 ft of 1/16" 7 x 7 cable AS93: \$.60
 Phenolic 1/4" x 2" x 4" AS56: \$2.24 (see ch 16 too)
 (2) Heim F34-14 or AS107: \$11.12T
 Fafnir HM6 bearing AS105: \$13.12T

tot: AS: \$72.41

Chap 9 Total: \$545.91

CHAPTER 10: CANARD

DESCRIPTION

COSTS

Prefab parts:

(2) CLT, Canard Lift tab (two parts) KB: \$10.50T

TR1: \$830.00 for
 canard, wing and
 winglet foam
 \$40 crating chg.

Hardware:

(6) AN4-7A Bolts AS58: \$1.38T
 (6) AN960-416L Washers AS67: \$.06T
 (6) K1000-4 Nutplates AS62: \$1.50T
 (12) AN426AD3-4 Rivets AS69: \$?

Glass:

17 yd UND (\$53.55 worth) will use 43.1 yd of 1st 50yd
 roll UND
 4 yd BID (\$12.80 worth) will use 26.1 yd of 1st 50yd
 roll BID

0-1: \$1.26T

Epoxy:

1 gallon (\$38.19 worth) AS16: 1.25 gal \$48.50 used: 4.55

Buy 1 gallon each
from Kreidel \$70?Foam:

(1) 1 x 6 x 10 H100 (cp34/7) AS18: \$3.95
 (2) 7 x 14 x 41 styrofoam AS18: \$39.00T
 (2) 7 x 14 x 64 styrofoam AS18: \$59.60T
 (1) 1 x 6 x 10 R100 AS18: (check plans
 & cps, this may be a duplicate of the H100)

Metal:9 sq inches of 1/8" 2024-T3 AS50: \$.92 ?
aluminumWood:

see cp35/6 on dowels

tot: AS \$106.41

Chap 10 Total: \$116.91

CHAPTER 11: ELEVATORS

DESCRIPTION

COSTS

Prefab parts:

(7) CS2 Hinges with bushing KB: \$36.75T
 (9) CS3 Brackets KB: \$17.10T
 (2) CS9 Plug KB: \$8.20T
 (2) CS10 Lead weights KB: \$9.50T
 (2) CS11 Lead weights KB: \$7.50T
 (2) CS12 Bellcranks w/ bushings KB: \$7.50T
 ((2) CS12-2 Bronze Bushing alone KB: \$.90T)
 (1) PTB Belcrank KB: \$5.25

tot: KB \$91.80

Hardware:

(2) AN3-6A Bolts AS58: \$.26T
 (2) AN3-15A Bolts AS58: \$.46T
 (4) AN3-10A Bolts AS58: \$.80T
 (9) AN509-10R7 Screws AS64: \$.63T
 (4) AN509-10R14 Screws AS64: \$.40T
 (7) AN525-10R10 Screws AS65: \$.63T
 (22) AN960-10L Washers AS67: \$.22T
 (28) MS21042-3 Nuts AS62: \$5.32T
 (2) AN470AD 4-5 Rivets AS69: ?
 (15) Pop Rivets AS69: ? (see plans page 11-2
 Avex 1601-0410 or Cherry MSP43 bottom right)

G1: 8.24T
 G1: 8.44T
 G1: 8.60T

Glass:

3 yd UND (\$9.45 worth) will use 46.1yd of 1st 50yd roll

Epoxy:

0.1 Gallons (\$3.82 worth) will use 4.65 gal of 5.0 gal

Foam:Part of two 7 x 14 x 64 AS18: \$59.60T
blocks (page 10-1)Check around for
source of blue foam
at 70% of AS prices.Metal:

1 pc. 62" of 1 1/4" O.D. x AS51: \$10.26
 .035 wall 6061-T6 alum. tubing
 1 pc. 80" of 1 1/4" O.D. x AS51: \$11.97
 .035 wall 6061-T6 alum.
 tubing

tot AS \$90.55

Chap 11 Total \$182.35

CHAPTER 12: CANARD INSTALLATION

DESCRIPTION COSTS

Prefab Parts:

(2) CNL Aluminum Bushings KB: \$4.60T
(2) CN2 Steel Bushings KB: \$2.60T

Hardware: KB Tot: \$7.20

(2) AN3-20A Bolts AS58: \$.50T
(2) AN4-13A Bolts AS58: \$.60T
(2) AN960-416L Washers AS67: \$.02T
(2) AN970-4 Washers AS67: \$.12T
(2) K1000-4 Nut plates AS62: \$.50T
(4) AN426AD3-3 Rivets AS69: ?

Glass:

BID scraps

Epoxy:

Minimal amount

tot: AS \$1.74

Chap 12 Total: \$8.94

G-1: 8?

CHAPTER 13: NOSE & NOSE GEAR

DESCRIPTION COSTS

SEE: CP25/1 on Nosegear and wheel well

Prefab Parts:

(1) NG1-L "S" Glass strut TR1: \$61.70
(1) SC Fiberglass strut cover AS: \$17.85*
(1) VENGR (NG50,51,53,54,55,56,57)

Worm Drive retraction assy.

includes belcrank component

KB: \$144.00

(1) NG3 Bracket

KB: \$2.55

(1) NG4 Bracket

KB: \$2.00

((1) NG10A/NGO Assembly-not needed if you are using the LST
spring assembly. (KB: \$2.90 + 3.35)

(1) NG6 Assembly (NG5,7,23,bushings
and spacers

KB: \$20.00

((1) NG6-Casting only

KB: \$7.50)

((1) NG6-Casting machined

KB: \$12.50)

(2) NG8 Plates

KB: \$6.90T

(Ken Brock also sells Inserts-NG9

\$3.35)

(2) NG14 Spacer

KB: \$5.00

(1) NG401A Castoring Nose wheel assy. KB: \$149.95

If you don't buy NG401A: Subparts:

((1) NG15A-R Swivel Block

KB: \$28.20)

((1) NG15-Al Mounting Plate

KB: \$5.00)

((1) NG16C Casting only

KB: \$12.95)

(If not purchasing NG401A, get from AS:

((1) Standard nosewheel and 2.80 x
2.50 x 4 tire & tube AS: \$45.35)

(2) LE 2026 Rudder pedals

KB: \$45.00T

(4) CS13 Bushings

KB: \$1.40T

(1) LST Spring Strut, nose gear

KB: \$71.95

((1) Spring only

KB: \$13.40)

(1) NG59 FLEX COUPLING

KB: \$33.75

2 lower coak

professional looking
p.tot tube WT#?

— WT# 43 polished

(1) NG61L 20" Shaft KB: \$4.60
 (1) NG63 Sleeve KB: \$1.50
 (1) NG67 Phenolic Block KB: \$2.20
 (1) NGA64 (64,65,68) V Crank Assby KB: \$10.95

Hardware: KB TOT: \$501.75

(3) AN525-10R10 Screws AS65: \$.27T
 (2) AN526-832-14 Screws AS65: \$.10T
 (8) AN509-10R14 Screws AS65: \$.80T
 (4) AN509-10R28 Screws AS65: \$1.00T
 (10) AN509 8R8 Screws AS65: \$.60T
 (3) AN4-10RA Bolts AS58: \$.75T
 (1) AN4-15A Bolts AS58: \$.35T
 (2) AN4-41A Bolts AS58: \$2.32T
 (1) AN5-41A Bolt AS58: \$1.50
 (2) AN3-6A Bolts AS58: \$.26T
 (2) AN3-7A Bolts AS58: \$.36T
 (2) K1000-3 Nut plates AS62: \$.38T
 (10) K1000-8 Nut plates AS62: \$1.90T
 (2) AN364-832 Nuts AS62: \$.10T
 (19) MS21042-3 Nuts AS62: \$3.61T
 (6) MS21042-4 Nuts AS62: \$1.38T
 (1) AN365-524 Nut AS62: \$.09
 (2) AN316-6 Nuts AS61: \$.54T
 (14) AN960-10 Washers AS67: \$.14T
 (6) AN970-3 Washers AS67: \$.30T
 (7) AN970-4 Washers AS67: \$.42T
 (2) AN970-5 Washers AS67: \$.20T
 (4) AN426AD3-3 Rivets AS69: ?
 (20) AN426AD3-4 Rivets AS69: ?

?
 Q1: \$1.33
 G1: \$1.8?
~~ST~~
 G1: \$1.24
 G1: \$1.30

Glass:

7 yd BID (\$22.40 worth) will use 33.1yd of 1st 50yd
 roll BID

Epoxy:

1/2 gallon (\$19.10) AS16: 1.25 gal \$48.50 5.15 used

Foam:

10 sq. ft. 2" thick urethane
 foam AS18: (2) 24 x 48 x 2": \$21.92T

(a few builders use blue foam as carving medium)

4.5 sq. ft. H250 have from chapter 4

(26 x 30 x 1/4")

(Good time to buy 2 part urethane:)

(2 gallons of X-40) (AS18: \$57.00)

Hastings plastic in
 santa monica has a
 better 2lb urethane
 about \$49.00 for 2gal
 TR5: \$17.00/Qt.

Metal:

2.5 x 3. x 1/8: 2024T3 alum. AS50: \$.60 ?
 sheet

4 ft of 1/4" O.D. x .35 wall AS51: \$2.52
 5052-0 aluminum

1 pc. .032 6061T6 AS?
 alum. tube.

Misc:

4 ft of 3/8: OD x 1/4" ID AS82: \$2.68
 tygon tubing

(1) 0715-153 tee	AS81: \$.65
(2) 0700-153 adaptors	AS81: \$.40T
(2) HM-6 rodends (RE4M6)	AS105: \$13.12T with bushing
BE SURE TO ORDER BUSHING	tot: AS: \$107.76
Chap 13 Total:	\$671.21

CHAPTER 14 CENTER SECTION SPAR

DESCRIPTION	COSTS
<u>Prefab Parts:</u>	
(2) SH1 Aluminum straps	KB: \$2.20T
<u>Hardware:</u>	
(4) AN4-15A Bolts	AS58: \$1.40T
(10) AN4-16A Bolts	AS58: \$3.50T
(2) AN4-17A Bolts	AS58: \$.70T
(32) AN960-416L Washers	AS67: \$.32T
(16) MS21042-4 Nuts	AS62: \$3.68T
Glass: <u> </u>	AS9: buy 2nd 50 yd roll
	UNI: \$157.50
18 yd UNI (\$56.70 worth)	will use 11.lyd of 2nd roll
(reflects change in CP)	
6 yd BID (\$19.20)	will use 38.lyd of 1st roll
50 yds 3" wide x .035 UND	AS21: \$16.70 or
Tape thickness varies.	
So make a trial layup, or (\$63 for 180 yd roll)	
fill up the space	
<u>Epoxy:</u>	
2 gallons (\$76.38 worth)	AS16: 1.25gal=\$48.50 7.15 used
<u>Foam:</u>	
10 sq. ft. 1/4" H100 tan	AS18: Purchase:
	(2) 34 x 37 x 1/4": \$49.92T
<u>Metal:</u>	
3ft of 1/8" x 1" x 1" alum.	AS52: \$4.41
angle.	
30" 1/8" x 2" 2024-T3 alum.	AS52: \$6.30
bar	
12" 1/4" x 2" 2024-T3 alum.	AS52: \$4.16
bar	
<u>Wood:</u>	
(1 ft 1 x 1 spruce	AS36: \$.85)
	AS tot: \$297.09
	Chap 14 Tot: 299.29

(THIS IS A GOOD TIME TO GET THE ENGINE MOUNT, IF YOU DON'T MIND BEING LIMITED TO A PARTICULAR VERSION OF AN ENGINE, TO MAKE EXTRUSIONS PERFECT FIT (INSTEAD OF CH 23))

CHAPTER 15: FIREWALL AND ACCESSORIES

HINT: The next 2 1/2 chapters (15, first half 16 and 17-you do second half 16 during 19) go very quickly. Get your supplies through canopy and order your canopy now. If you want to have cowl on hand to fair the turtle deck from canopy to cowl, order it now too.

G1: 1.32
G1: 3.20
G1: 66

DESCRIPTION

COSTS

Prefab Parts:

(2) CS15 Belcrank with bearing	KB: \$16.50T
(4) CS71 Brackets	KB: \$8.00T
(2) CS72 Brackets (4 pcs.)	KB: \$10.00T
(2) CS75 Bushings	KB: \$1.80T

KB: \$7.00T

KB: \$107.00T)

KB: \$14.90T)

tot: KB: \$43.30

the engine mount so you can
firewall with minimum slop.)

: \$.14T	
: \$1.30T	GI: \$1.20
: \$.72T	GI: \$1.60
: \$.50T	GI: \$1.44
: \$.50T	GI: \$1.44
: \$.34T	GI: \$1.44
: \$.18T	GI: \$1.44
: \$.4.18T	GI: \$1.44
: \$.92T	
: \$.04T	

: \$.7.16T
5: \$67T
: \$.1.96T (polyflow)

Note: Kreidel highly
recommends
semi-metallic
brake shoes

S52: \$3.10

ALUM IF SKIPPED EARLIER)

t: AS \$88.04

total: \$131.34

I (before wings)

KB: \$31.90T
KB: \$2.20T
KB: \$1.60T
KB: \$5.50T
KB: \$0.90T
KB: \$9.45
KB: \$0.90T
KB: \$3.95
KB: \$2.80T

Get cheaper at
a ski rental shop

— wt \$10.60

(2) BA Brake arms

((2) T-18 Master Cylinder

((2) 227-6 Reservoir

(This is also a good time to get
properly fit extrusions through

Hardware:

(2) AN509-10R8 Screws	AS65
(10) AN3-6A Bolts	AS58
(4) AN3-7A Bolts	AS58
(2) AN4-10A Bolts	AS58
(2) AN4-11A Bolts	AS58
(34) AN960-10L Washers	AS67
(18) AN960-416L Washers	AS67
(22) MS21042-3 Nuts	AS62
(4) MS21042-4 Nuts	AS62
(4) AN380-2-3 Cotter pins	AS68

Misc:

(2) AN210-2A pulleys	AS96
(2) Cleveland 10-35	AS14
(2) Nyloseal#269-P elbows	AS81

Metal:

6" of 1/8 x 1" x 1 1/2" 2024T3 A
extruded angle

(GOOD TIME TO GET FIBERFRAX AND
(Chapter 4)

Chap 15 T

CHAPTER 16: CONTROL SYSTEM PART

DESCRIPTION

COST

SEE CP 26/1 on Stick Grip

Prefab Parts:

(2) LESG1 stick grips
(2) CS1 inserts
(4) CS17 spacers
(2) CS1A inserts
(2) CS201 Bushings
(1) CS122-124 Belhorn
(2) CS202 Bushings
(1) CS181 Inserts
(2) CS112 Bushings

((1) CS120 Universal KB: \$21.30)
Don't need if buy Aircraft Spruce
((1) CS123 Bearing KB: \$2.15)
Don't need if buy Aircraft Spruce

WAG AERO has these
at about \$12.50
Box 181, Lyons WI
53148 \$2 postage
(order 4)

Hardware: tot: KB \$59.20T

(2) AN3-13A Bolts AS58: \$.46T
(1) AN4-15A Bolt AS58: \$.35
(1) AN4-17A Bolt AS58: \$.35
(4) AN3-7A Bolts AS58: \$.72T
(2) AN4-20 Bolts AS58: \$.70T
(5) AN3-11A Bolts AS58: \$1.00T
(2) AN3-6A Bolts AS58: \$.26T
(2) AN3-5A Bolts AS58: \$.26T
(16) AN960-10 Washers AS67: \$.16T
(8) AN960-416 Washers AS67: \$.08T
(5) AN970-3 Washers AS67: \$.25T
(2) AN960-1016 Washers AS67: \$.22T
(15) MS21042-3 Nuts AS62: \$2.85T
(2) MS21042-4 Nuts AS62: \$.46T
(2) AN310-4 Nuts AS61: \$.26T
(2) AN316-4 Jam nuts(csl02) AS61: \$.20T
(16) AN100-3 Thimbles AS91: \$1.76T
(4) AN100-4 Thimbles AS91: \$.48T
(10) AN470AD4-10 rivets AS69: \$.20T
(4) 18-2-G Nicopress Sleeve AS91: \$.60T
(1) AN393-19 Clevis pin AS68: \$.18T
(1) AN416-1 Safety pin AS68: \$.18T
(2) AN380-2-2 Cotter pin AS68: \$.02T
(8) 1/8" Pop rivets AS69: \$. ?

G 1.8.40
133
-33
160
?
180
124
122

Glass:

2 yd BID (\$6.40 worth) will use 40.1yd of 1st 50yd
roll BID

Epoxy:

0.1 Gallon (\$3.82 worth) will use 7.25 gal of 7.5 gal
(good time to get 1.25 gal)

Foam:

3/8" thick type H45 tan PVC AS18: purchase: (1 left ch 8)
(1) 34 x 47 x 3/8": \$17.90

Metal:

15sq. inch .063 2024-T3 alum. AS50: \$.63
(1) 6ft 1/2" x .035 wall 2024-T3 AS51: \$8.82T
alum tubing
(2) 6 ft pcs 3/4" x .058 wall AS51: \$14.28T
6061-T6 alum tubing
3 ft. 5/8" x .049 wall 4130 AS43: \$6.06
steel tubing

Phenolic:

1/4" thick sheet 2" x 12" AS56: \$6.72

Wood:

4" x 6" of 1/4" plywood (firewall (left from ch 4))

Misc:

(1) MS20271-B10 Universals AS108: \$25.08T
(2) HM-3 HEIM rodends AS105: \$9.30T
(2) HM-4 HEIM rodends AS105: \$9.60T

WAG AERO has these
at about \$12.50!

See SOI idea
on Bearings instead

22 ft. of 3/32" dia. 7 x 19 AS93: \$6.82
 stainless steel cable
 14 ft of 3/16 x .025 Nylaflo AS83: \$1.96
 tubing (33NSR)

(1) Boston FB 1013-8 Bronze AS113: \$2.10

AS tot: \$121.27

sub-Chap. tot: \$180.47

CHAPTER 16 PART II (don't need these til Chapter 19)

(8) CS1 Inserts KB: \$8.80T
 (2) CS131 Spacers KB: \$2.80T
 (2) CS128 Belcrank w/Bearings KB: \$16.50T
 (4) CS127 Brackets KB: \$7.00T
 (2) CS132L Belhorn KB: \$23.30T
 (2) CS181 Inserts KB: \$7.90T

Hardware: KB tot: \$66.30

(8) AN3-7A Bolts AS58: \$1.44T
 (8) AN3-11A Bolts AS58: \$1.60T
 12 (4) AN3-5A Bolts AS58: \$.52T
 (8) AN3-5A Bolts AS58: \$1.04T
 (2) AN3-16A Bolts AS58: \$.50T
 (74) AN960-10 Washers AS67: \$.74T
 (10) AN970-3 Washers AS67: \$.50T
 (2) AN960-1016 Washers AS67: \$.22T
 (30) MS21042-3 Nuts AS62: \$5.70T
 (12) AN100-3 Thimbles AS91: \$1.44T
 (20) AN470AD4-10 rivets AS69: \$.40T
 (8) 18-1-C Nicopress Sleeve AS91: \$1.04T
 (8) 18-2-G Nicopress Sleeve AS91: \$1.20T
 (4) AN393-9 Clevis pin AS68: \$.60T
 (2) AN393-19 Clevis pin AS68: \$.36T
 (6) AN416-1 Safety pin AS68: \$1.08T

Metal:

(1) 6ft 1/2" x .035 wall
 2024-T3 AS51: \$7.62
 (1) 6ft 3/4 x .058 wall
 6061-T6 alum tube AS51: \$7.14

Misc:

(2) Ms20271-B10 Universals AS113: \$50.16T
 (8) HM-3 Heim rodends AS105: \$37.20T
 32 ft of 1/16" dia. 7 x7
 stainless steel cable AS93: \$4.80T

AS sub-tot: \$125.30

Sub-chapt. total: \$191.60

Good time to buy the
 alternative suggested
 by Squadron 1
 (torrington
 bearings).

CHAPTER 17: ROLL/PITCH TRIM SYSTEM

DESCRIPTION

COSTS

Prefab Parts:

(1) PTH Aluminum Handle KB: \$10.95
 (1) RT1 Handle KB: \$6.65
 (2) RT2 Steel bracket (L & R) KB: \$4.50T

Hardware:

tot: KB: \$22.10

(1) AN3-6 Bolt AS58: \$.13

G-1: \$?

(1) AN3-7 Bolt	AS58: \$.18
(3) AN3-11A Bolts	AS58: \$.60T
(1) AN3-13A Bolt	AS58: \$.23T
(14) AN960-10 Washers	AS67: \$.14T
(1) AN970-3 Washer	AS67: \$.05
(4) MS21042-3 Nuts	AS62: \$.76T
(2) AN310-3 Nuts	AS62: \$.24T
(2) AN380-2-2 Cotter pins	AS68: \$.06T
(6) AN100-3 Thimbles	AS91: \$.96T
(4) 18-1-C Nicopress Sleeve	AS91: \$.52T
(4) Phenolic Washers .5 OD	AS67: \$.96T
x 3/16" I.D. x 1/16"	

Glass:

BID scraps

Epoxy:

Minimal

Wood:

1/4 plywood scraps(firewall) see ch 4

Misc:

(1).35 x.05 steel springs 30" AS30: \$4.00
(cut to 6" and 2" long)

Refer to tension spring Long EZ

4ft 1/16" x 7 x 7 cable AS93: \$.60

(2) .35 x .06 compression AS93: \$2.40T
spring .5" long

AS tot: \$11.83

Chap 17 Total: \$33.93

for more positive
springs:
HS \$15.00T

CHAPTER 18: CANOPY

SEE: CP 31/1, 29/5 or 24/7 on canopies

Prefab Parts:

(1) Long-EZ Plexiglass canopy	RAF: Clear \$199, Green \$229 Smoke or Bronze \$249
(1) C1-L Handle	KB:
(2) C2-L Arms	"
(2) C3 Lugs	"
(1) C4 Block	"
(2) C5 Rods	"
(2) C6 Tubes	" \$35.20kit
(1) SC1 Catch	KB: \$5.95
(1) C21 Handle	KB: \$3.25
(6) CS13 Spacers	KB: \$2.10

tot: KB \$46.50

((1) FEGAS Spring Asseblly AS53: \$24.50)

Hardware:

(8) AN509-10R30 Screws	AS65: \$2.08T
(8) AN509-10R10 Screws	AS65: \$.64T
(3) AN525-10R10 Screws	AS65: \$.27T
(8) AN525-10R12 Screws	AS65: \$.80T
(1) AN525-10R16 Screws	AS65: \$.15
(1) AN525-10R24 Screw	AS65: \$.20
(1) AN3-10A bolts	AS58: \$.18
(3) AN3-13A bolts	AS58: \$.69T

G1: A ?
.48
.20

G1: A.15
.60

(3) AN3-7A bolts	AS58: \$.54T
(2) AN3-4A bolts	AS58: \$.26T
(2) AN3-6A bolts	AS58: \$.26T
(1) AN3-12A bolt	AS58: \$.20
(4) AN470AD3-7 Rivets	AS69: ?
(53) AN960-10L Washers	AS67: \$.53T
(6) AN970-3 Washers	AS67: \$.30T
(35) MS21042-3 Nuts	AS62: \$.65T
(2) 18-1-C Sleeves	AS91: \$.26T
(2) AN100-3 Thimbles	AS91: \$.22T

.45

 .24
 .18

Glass:

7 yds BID (\$22.40 worth) will use 47.1yd of 1st 50 yd roll BID
 AS9: Buy 2nd roll BID: \$160.00

2 yd. UND (\$6.30 worth) will use 13.1yd of 2nd 50yd roll UND

Epoxy:

0.8 gallons (\$30.55 worth) AS16: 1.25 gal \$48.50 8.05 used

Foam:

1" x 2" urethane (see plans pg2-3)
 (should have from 5,9,13 & 14)
 (good to use a 2 part 2 lb. urethane:)
 (2 gallons of X-40 is good (AS18: \$57.00)
 (If you didn't buy it for nose.)
 2gal.

Hastings Plastic:
 of Santa Monica
 costs \$49 for

Misc:

16" MS20001-P6 Hinge (should have from ch.9)
 (2) 4" long .35 x .05 steel AS20: \$1.80T
 spring.
 10" 32 guage steel piano wire AS53: 326A (.089" dia), 40'
 for \$2.25)
 (50' reel of P-strip AS 31 & 88: \$20.50)

Metal:

1 1/2" x 5" x .032 2024-T3
 Aluminum AS50: \$.17
 8" 1/8" x 1" x 1" 2024-T3 AS52: \$4.60/ft
 Alum. angle
 5" x 5" x .025 2024-T3 Alum. AS50: \$.51

Misc:

1ft 1/16 x 7 x 7 cable AS91: \$.15
 3 pcs 5/16 O.D. x .028 wall AS30: \$4.80T
 fiberglass arrow stock
 (If you are using a strut to attach the cross brace
 behind the head reast, you only need 2 arrow stock)
 16" of MS20001-P6 Hinge AS53: \$23.90
 (save 1/2 for ch 20)
 2 1/2" MS20257-P2 Hinge AS53: 36" for \$3.60
 Hartwell H-5000-2 flush
 latch AS268: \$4.50
 1/2 gal of spraylat too plus AS56: \$16.50
 Get a 3-4" brush if you don't have spray equip.

G1: \$3.00

tot: AS \$306.01

Chap 18 Total: \$551.51

CHAPTER 19: WINGS, AILERONS/WING ATTACH

DESCRIPTION

COSTS

SEE CP 28/9 on Wing Tip Lights

((1) LE2625 Boring Tool KB \$29.50)

Prefab parts:

(12) LWA9 Bushings

KB: \$51.00

(2) A2 Brackets

KB: \$4.50

(4) A5 Brackets

KB: \$8.00

tot: KB \$63.50

(TASK RESEARCH has all
canard, wing and wing-
let foam for \$830.00T
crate is \$40.00

Hardware:

(12) AN960-816 Washers

AS67: \$.60T

(10) AN960-816L Washers

AS67: \$.50T

(14) AN960-10L Washers

AS67: \$.14T

(14) K1000-3 Nut plates

AS61: \$2.66T

(6) AN363-820 Nuts

AS62: \$4.80T

(28) AN426AD3-3 Rivets

AS69: ?

(14) AN525-10R8 Screws

AS65: \$1.12T

Glass:

70 yds. 3" wide x

.035 UND tape

AS21: purchased ch 14

(180yd \$63)

Buy 3rd 50 yd roll UND

(You should have two on

hand; according to plan

you will have 15 yds left

over however)

AS9: \$157.50

56 yds UND (\$176.40 worth)

will use 19.1yd of 3rd 50yd

roll UND

9 yds BID (\$28.80 worth)

will use 6.1yd of 2nd 50yd

roll BID

Foam:

(10) 7 x 14 x 64 styrofoam
blocks

AS18: (6) \$178.80 (should have
(4) partially used left)

SQ 1 has a source
for blue foam at

(4) 7 x 14 x 41 styrofoam
blocks

AS18: (2) \$39.00 (should have
(2) partially used left)

about 70% of cost
of Aircraft Spruce

Epoxy:

4 gallons (\$152.76 worth)

AS16: (3) 1.25 gal \$114.57 12.05
used of 12.75 tot.

Metal:

3"x10" .016 2024-T3 Alum.

AS50: \$.48?

24" of 1/8" x 2" 2024-T3

AS52: \$5.04

Aluminum bar

12" of 1/4" x 2" 2024-T3

AS52: \$4.16

Aluminum bar

18" of 3/4" x .058 6061-T6

AS1: \$1.79

alum tube

Misc:

3ft. of MS20001-P6 hinge

should have 2nd half ch 18

*Follow Tube for
Hinge wear
P2: \$1.30/ft*

4 pcs 3ft x 3/8 dia. AS45: \$11.88T
cold rolled steel
25ft 3/16 O.D. x .025 wall AS83: \$3.50
Nylaflow tubing

tot: AS: \$526.54
Chap 19 Total: \$590.04

CHAPTER 20: WINGLETS/RUDDERS

(special note: * delete item if building new high performance rudders)

DESCRIPTION	COSTS
PURCHASE RUTAN FULL RUDDER PLANS	\$18.50 (CP39/1)
<u>Prefab Parts:</u>	
(2) CS301 Steel Belhorn	KB: \$4.25 Left & Right
<u>Hardware:</u>	tot: KB \$8.50
(10) AN525-10R8 Screws	AS65: \$.80T
(6) AN960-10L Washers	AS67: \$.06T
(4) MS21042-3 Nuts	AS62: \$.76T
(6) K1000-3 Nut plates	AS61: \$1.14T
* (12) AN426AD3-3 Rivets	AS69:
<u>Glass:</u>	
10 yd UND (\$31.50 worth)	will use 29.1 yd 3rd 50yd roll
6 yd BID (\$19.20 worth)	will use 12.1 yd 2nd 50yd roll
<u>Epoxy:</u>	
11 gallon (\$38.19 worth)	AS16: 1.25 gal \$48.50 13.05 used
<u>Metal:</u>	
10" 1" x .035 wall 6061-T6	AS51: \$1.06
Alum tube	
* 16" MS20001-P6 hinge	AS53: \$23.90 (for 36")
(2) 4 1/2" long .35 x .05 steel	AS30: \$1.80T
spring	
10" 3/32" steel piano wire	AS53: ? (should have for ch 18-AS:
326A (.089" dia) 46' for	\$2.25)
	tot: AS \$78.02
	Chap 20 Total: \$86.52

< Be sure and have antenna ready also
i.e. Radio System
Technologies RST 857
Task has kit- ~~prewired for~~
see above \$25
916-272-2203
Could also order
new antenna prewired
for command for \$15.

SPECIAL PURCHASES: IF YOU PUT ON HIGH PERFORMANCE RUDDERS

(1) Replace hinge with 30" MS20001P5 AS53: \$23.42T
(8) Additional K1000-3Nut plates AS61: \$1.52T
(28) Pop rivets-Cherry MSC-32 AS69: \$4.48T
(24) Pop rivets-AVEX16-04-0412 AS69: \$2.40T
or Cherry BSC-44 (AS69: \$1.44T)
(8) Additional AN525-10R8 Screws AS65: \$.64T
(2) AN960-3 Washers AS67: \$.02T
(12) Additional AN960-10L Washers AS67: \$.12T

Pour in Place

*DELETE FROM Chapter 20:

AN426 AD3-3 Rivets and hinge

AS tot: 34.04T
or \$10.14 if didn't buy hinge

CHAPTER 21: STRAKES - FUEL/BAGGAGE

DESCRIPTION	COSTS
<u>Prefab Parts:</u>	
(2) SB Glass sump blisters	AS32: \$36.90T
(2) FT 18 fuel cap assembly	KB: \$29.80T
((2) FT 18-5 O-rings	KB: \$.85T)
((1) AN8226D fuel fitting	KB: \$2.30)
((1) AN910-2D Coupling	KB: \$3.00)
((1) AN911-2D Nipple	KB: \$1.50)
((1) EFP (Optional) Electric Fuel Pump 12v	KB: \$34.95)
((1) EFP-1 Fuel Pump 24v	KB: \$67.00)
((2) VE18 Drain valve	KB: 9.20T)
((1) VE108 Fuel Valve	KB: 29.50)

TASK RESEARCH also sells a fuel baggage
strake kit -16 pieces for TR1: \$984.00
(same kit less rib and baffles TR1: \$884.00)
(shipping box TR1: \$20.00)

Hardware: None

Glass

(16 yds UND (\$50.40 worth) you will use 45.1yd of
3rd 50yd roll UND)
11 yds BID (\$35.20 worth) you will use 23.1yd of
2nd 50yd roll BID)

Epoxy:

(1.9 gallons (\$72.56 worth) AS16: 1.25 gal \$48.50)
14.95 gal used of 15.25 tot

Foam:

(6.3 sheets 34 x 47 x 3/8 tan AS18: Purchase:
(1 from ch 16)
H45 (6) 34 x 47 x 3/8": \$107.40

Metal:

2 sq. in. 1/8" 2024-T3 aluminum AS50: \$.16?
26 ft 3/8" O.D. x .035 wall
1100-0 alum. versatube AS51: \$.52/ft = \$13.52
10 ft 1/4" O.D. x .035 wall
1100-0 alum. tube AS51: \$.36/ft = \$3.60

Note: Fuel system plumbing and hardware, including
engine components, hose lengths, pressure gauge, etc.
can vary depending on engine installation. See plans
and order components to suit.

(tot: AS197.08)

but if TASK strakes:

Tot 1001.28

CHAPTER 22: ELECTRICAL SYSTEM

DESCRIPTION	COSTS
Note! Due to the various options, this bill of materials does not include electrical items.	

T18-2 flush gas cap
KB \$29.95

HS: \$64T

AC Fuel pump
HS\$79 & HS\$35

HS\$6.00, HS\$9.50,
and HS\$11.50.

104HD: HS\$15.50

108HD: HS\$16.50

For strake leading
edges only: HS\$375

Fuel drain valve
CAU -110 & 3.60
GZ

CONSIDER

P. PROUT'S

FUEL GUAGES

GZ: AC Fuel Pump (0-235 Eng)
\$69.25

Aire-Sciences radios

Navcom RT553A HS:\$1505

Navcom RT563A HS:\$2047

(Aircraft Spruce Lists VFR Instruments)*
SEE CP 30/11 & 26/11 on alternators, 34/8 on
batteries, 34/9 on Compucruise, 28/9 Turn
Coordinators, 28/9 on wingtip lights.

Prefab Parts:

((1) LE2-LL Landing Light Assembly KB: \$34.00)
(if didn't purchase in Chapter 9)
(Compuflight TR3: \$259.95)
(with remote TR3: \$299.95)

Transponders:

RT-887 HS:\$837

RT-787 HS:\$767

Com:720 channel

RT-551A: HS\$1085

Micrologic

ML5000A: HS:\$1395

ML5000A w/antenna
HS:\$1495

Telex

Headsets:

D-950: HS\$112

E-951: HS\$129

DBM-1010: HS\$126

Microphones:

66T: HS\$48

100TRA: HS\$48

Cloth helmets:

4 sizes: HS\$25

David Clark Co.

Headsets:

H10-30: HS\$135

H10-40: HS\$169

Push-to-talk buttons:

C10-15: HS\$35

Helmets:

J11-30: HS\$349

Visors:

Clear: HS\$77.65

Gray: HS\$83.95

Emergency Recon

ELT: HS\$210

extra battery: HS\$27.95

see HS catalogue:

B & D Instruments

Astronautics

EDO Corp

United Instruments

Hamilton

Airpath

see HS catalogue

for 1.5" and 2.25"

instruments

G2: 11055 \$33-46.75

Compuflight Datcom Hawk:

Basic Computer

HS\$249.95

Remote Computer

HS\$279.95

Floscan

Transducer: HS\$42

Prestolite wire

see HS catalogue

We have many instruments,
cables etc

AV 547 Antenna Splitter
2 NAV G2: 24.75
Others 35.50-42.50
DME Antennas: 23.50-35.50
TXP Antenna: 23.50-35.50

NARCO ELT-10
\$246.50
Battery ELT-10
\$30.00

63 Intercom
ECS 442
2 station
\$120.00

AP: 112.46
AP: 134.96
AP: 127.46

AP: 158.00
AP: 15

ELT Batteries
Spark plug AP
AP 17.50-45

Wood circuit breakers
HS\$13.50ea.

B & C for different
alternators see
HS catalogue
D.Hoffman Cockpit
light: HS\$12.50ea

(Long EZ Panel Marking Set AS31: \$4.25)

CHAPTER 23: ENGINE INSTALLATION

DESCRIPTION	COSTS
SEE CP 34/9 on air filters, 33/6, 31/7 & 28/9 on B & T Props, 34/8 & 28/8 on cowls, 26/2 on Engine choice, 31/5 on engine mounts, 31/8 on Exhaust, 25/2 on Fuel pump, 32/4 on magnetos, 31/5 on Oil orifice, 24/4, 25/2, 26/6, 33/6 on Props, 30/5 on prop extensions, 29/8 on Rolls Royce 0-240 engine, 32/4 on Slick mags, 32/5 on Spinners.	

Prefab Parts:

((1) BJX-1 Stainless steel Balljoint Exhaust
System for 0-235 only KB: \$250.00)

Exhaust Headers: HS\$265
w/heat muff: HS\$300
Blo-Proof Exhaust Gaskets
Copper Lycoming: HS\$7.20T
Copper Continental:
HS\$6.00T *Asborne #160
gasket \$84.00*
Spiral Lycoming: HS\$16.00T *#1000
gasket \$17.00*
Spiral Continental:
HS\$16.00T

Exhaust Nuts:
Continental (Brass):
HS\$3.60T

Lycoming (Steel): \$2.00T

Slick mags:

Continental: HS:\$181T

Lycoming: HS\$172.75T

Neoprene Gasket material

HS: 6.50 per foot.

Nylon Cable ties:

see HS catalogue

Exhaust Springs:

HS\$1.00ea

G2: \$1.17 (18mm copper baskets)

G2: Anti-Seize Compound \$2.25

Derodul \$2.30 - 5.90/ft

8" prop extension?

HS\$290.00

WTA 145 or for Bendix mag. \$160.00
Vacuum Pump \$3.00
Asborne 300-1 261.00

((1) KM01068 SAE-1 Prop Plate KB: \$10.95)
(See KB catalogue-tons of prop plate sizes)
((1) KM02548 Threaded Drive lugs (Cad) KB: \$16.50T)
((1) KM06018 3" Prop Extension KB: \$170.00)
((1) KM06018-1 4" Prop Extension KB: ~~\$165.00~~ 170
((1) KM01068 Spacer Plate KB: \$13.95)
((1) M1070-2505 Spacer plate SAE2 KB: \$19.35)
((1) LYC-0235 Engine mount (Conical) KB: \$150.00)
((1) LYC-0235D Engine mount (Dynafoal) KB: \$275.00)

(1) 50061 6" Prop Extension \$275
(1) 50062 6" " " "
KM01068 - SAE2 Spacer Plate \$22.50

((1) VECG Complete Control Group
 (Mixture, Throttle, Carb Heat) KB: \$79.50)
 ((1) VETC Single Throttle etc control KB: \$31.75)
 ((1) VESPl Spinner KB: \$200.00)
 ((1) CCB Carb Cont. Bkt. KB: \$18.50)
 ((1) 0701-162 Nylon Adapter KB: \$.35)
 ((2) 0711-162 Nylon Elbow KB: \$1.00T)
 ((4') 0585-1265 Breather hose KB: \$12.40)
 ((15') 0585-107 Fuel Line KB: \$14.25)
 ((2) SP-5 Spacers KB: \$4.50T)
 ((1) VELY-13 Carb Ht. Flange KB: \$68.35)
 ((1) VECHVA Carb Heat Assy KB: \$68.35)
 (2) LL3 KB: \$3.80T)
 (2) LL4 KB: \$3.00T)
 (1) Spinner Kit AS30: \$87.50
 (1) Carb Heat Box AS31: \$58.00
 (1) Air Filter AS31: \$8.44

Ellison Throttle body
injector: HS\$1000-1300

Kevlar spinner cone:
HS\$60.00

*said to need modification
for the partner kit
WT \$72.45*

Instead of the following see CP 26/5 on NACA Inlet

Naca inlet: HS\$75.00
pour foam for naca:
HS\$20.00

(1) CI - Cowl inlet AS32: \$30.40
 (1 ea) CCT and CCB - Continental
 cowl or AS32: \$283.40T
 (1 ea) LCT and LCB - Lycoming
 cowl AS32: \$283.40T
 (Aircraft Spruce also has Kevlar for Lycoming:
 (1 ea) LCT & LCB Lite - Lycoming AS: \$448.50T)

Smoother version:
 HS\$350
 Kevlar: HS\$450

Glass:

3 yd. BID (\$9.60 worth) will use 26.1 yd of
second 50yd roll

Sensenich Props see
HS catalogue

Epoxy:

0.2 gallon (\$7.64 worth) will use 15.15 gal of 15.25
(may need 1.25 gal more \$48.50)

Metal:

20" x 24" x .020 soft alum. AS(\$8.00?)
6061-0

Note!: Due to variations with different engine models,
the hardware and components are not listed. Consult
Chapter 23 and Section II. Determine your specific needs,
then order.

< AMS012 10-W50 KB \$6.25qt.

CHAPTER 24: COVERS/FAIRINGS/CONSOLES

DESCRIPTION	COSTS
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<u>Prefab Parts:</u>	None
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<u>Hardware:</u>	None
------------------	------

Glass:

2 yds BID (\$6.40 worth) will use 28.1yd/ 2nd 50yd
roll BID

Epoxy:

0.3 gallons (\$11.46 worth) AS16: 1.25 gal \$48.50 15.45 used

*PM 801-A Placard KB \$3.00
EXPERIMENTAL decal: KB \$3.00*

Foam:

2" x 24" x 30" Urethane should have from ch 16, 21
.35 thick type R45 dark blue
foam (see pg 2-3)

Metal:

5" x 7" x .025 2024-T3 Alum. AS50: \$.71?
Chap 24 Total: AS \$49.21

CHAPTER 25: FINISHING

DESCRIPTION

COSTS

Sandpapers:

9" x 11" sheets, Silicon Carbide
or Aluminum oxide types
(50 sheets) Coarse - 36,40 AS29: 36=\$25.00T
or 60 grit
(100 sheets) Medium-100-grit AS29: \$47.00T
wet/dry
(100 sheets) Fine-220 grit AS29: \$32.00T
wet/dry
(100 sheets) Fine-320 grit AS29: \$32.00T
wet/dry

Filler materials:

Epoxy and Micro (as required) ?
(6 quarts) feather fill AS20: \$60.90T
(with catalyst)

Primer:

(3 gallons) Dupont 100s, 70s \$57.75T
3011s laquer primer surfacer. \$8.60/gal

Zoletone AS21: \$26.20 gal

(one tube) Spot putty. NL
(as req'd) Stitts micro putty* AS196: \$12.22 qt,
\$44.99 gal

(one tube) Silicone Bath tub calk NL

ULTRALITE AS19: \$14.75 a gal.

FEATHER FILL: AS20: \$31.65 a gal.

Sterling filler AS20: \$112.00 for 2 gal.

Acrylic laquer or Acrylic enamel NL
(Dupont)

* These materials are available through distributors,
the remainder are available locally in most areas through
auto parts suppliers.

Note! Due to the wide variance of preferences finishing
materials are not supplied with the basic kit.

CHAPTER 26: UPHOLSTRY

DESCRIPTION

COSTS

Upholstry kit consists of: AS30: \$190.00T

(2) Custom-fit suitcases

(2) Custom-fit seat cushions

(2) Custom head rests.

Chap 26 Total: \$190T

*Mirror Glaze
Polish @ 2: \$3.80
Cleaner @ 2: \$3.80*

Zoletone (Factory
store: MANN Bros.
757 N. La Brea LA
(213) 936-5168 at
\$23.90/gal or
Tumans, 1002 Santa
monica Blvd SMO
393-0546

Sq 2 has Zoletone
paint samples chips
to lend out.

*< Brake Fluid
5606: 1 gal 10.50
1 qt 3.80*