



# F-20 MATERIAL LIST

Drawings reduced for informational purposes only.

Item No.	Description	Qty.	Item No.	Description	Qty.
<b>BULK ITEMS</b>					
2030001	48" yellow nyrod-inner	2	2431171	super heavy duty nylon hinge point	2
2030002	48" blue nyrod-outer	2	5930277	2-1/2"x3/8" aluminum extrusion, spar clamp	2
2431090	3" straight tread tire	2	5930436	1/4" O.D. x 1-1/4" #8-32 threaded aluminum insert	2
4830052	F-20 decal sheet	1	5931295	1/4"x13"x.035" torque tube	2
5930054	1/2"x8"x12" foam rubber	1	5931297	3/8" diameter x 1-1/4" dowel with 1/4" diameter hole	2
5930688	1/4"x3/4"x26" balsa trailing edge	2	6030165	heavy duty plug-in torque rod linkage sets	2
5931211	1/4"x18" triangle balsa	4	5931320	3/32"x1-1/4" diameter ply disk	2
5930611	1/8"x4"x10" sheet balsa	1	0730065	#2x3/8" slotted pan head screw	8
5931304	4"x10"x1/16" sheet ply	1	6030128	1/16"x1-1/4" diameter balsa circles	6
5931305	foam stab	2	6030087	Delrin pivot bushings (4 pieces)	1
5931306	foam vertical stab	1	<b>THROTTLE LINKAGE (BAG #4) - 6030504</b>		
5931307	foam wing, left	1	1430478	#2-56 hex nut	1
5931308	foam wing, right	1	2431020	nylon socket ball link	1
5931309	fiberglass nose	1	2431073	male ball link #2-56 threaded end	1
5931310	fiberglass mid-section	1	2431030	Kwik Link, steel clevis	1
5931311	fiberglass tail	1	5930327	13" yellow nyrod-inner	1
5931312	leading edge extension, right	1	5930324	18" blue nyrod-outer	1
5931313	leading edge extension, left	1	2431066	#2-56x4" rod threaded both ends	2
5931314	fiberglass inspection cover	1	<b>PNEUMATIC SUPPORT EQUIPMENT (BAG #5)-6030505</b>		
5931315	A.B.S. cockpit	1	0730005	wood screw #2x3/4" slotted pan head	2
5931316	A.B.S. butyl canopy	1	2431093	1/16" tee	3
5931317	A.B.S. scale detailing parts	1	2431096	air pressure gauge and pal nut	1
6030205	upright Sure Flow fuel tank	1	2431097	quick disconnect	4
6030500	F-20 thrust tube assembly	1	2431099	air tank cap	1
5930723	1/4"x3/4"x13" trailing edge horizontal stab	3	2431145	3/16" wheel collar with set screw	2
2030021	36" blue nyrod, antenna liner	1	2431167	1/16" wheel collar with set screw	1
2431132	1/2 liter air bottle (small)	1	5930787	3/64" diameter x 6" wire	1
6030077	Sidewinder missile	1	5930788	2" yellow nyrod	1
<b>FLYING STAB (BAG #1) - 6030501</b>					
0730097	#4-40x1/2" slotted pan head screw	1	5930920	air fill bottle stopper	1
1410009	#4-40 hex nut	2	5931318	1/8-1/16" I.D. x 14" air line	1
2431122	.255" I.D. shoulder bushing	2	2431095	fill valve and hex nut	1
2431152	#4-40 solder clevis for 1/8" diameter rod	1	5931320	3/32" thick x 1-1/4" diameter ply disk	2
2431154	#4-40 1/8"x12" rod threaded one end	1	<b>F-20 CUSTOM NOSE GEAR (BAG #6) - 6030506 - REQUIRED OPTION</b>		
2431197	#87 #4-40 heavy duty ball link	1	0730091	#4-40x1" pan head bolt	4
5930431	aluminum torque tube 1/4" dia. x 25"	1	1330211	#4 flat washer	4
5931258	72" shielded cable for elevator servo extension	1	1410009	#4-40 hex nut	4
5930314	aluminum bar, 1/4"x1/2"x1-1/8"	2	2431026	solder Kwik Link	1
0780048	#6-32 x 1-1/4" cap screw	2	2431030	Kwik Link, steel clevis	1
0730052	#6-32x1/2" cap screw	2	2431089	2-1/4" straight tread tire	1
5931286	1/2"x17-1/8" aluminum yoke	1	5930193	molded piston rod	1
5930260	1-13/16"x1-13/16"x1/8" thick lead sheet	1	5930373	return spring clips, left and right	1
<b>VERTICAL STAB (BAG #2) - 6030502</b>					
2431010	small hinge point, nylon with steel pin	1	5931106	9/32" O.D. x 3/4" brass tube	1
2431026	solder Kwik Link	1	5931141	aluminum nose gear yoke	1
2431028	Kwik Link, 4" rod, threaded one end	1	5931146	aluminum upper strut	1
2431030	Kwik Link, steel clevis	1	5931221	1/4"x2-1/2"x4" plywood	1
2431066	#2-56x4" rod threaded both ends	1	5931223	#4-40x12" preshaped rod, threaded one end	1
5930513	3/16" plug-in control arm	1	2431028	#2-56x4" rod threaded one end	1
5930511	3/16" plug-in insert	1	2431067	#2-56x1-1/2" threaded rod	1
5930674	3/16" diameter x 5" brass torque tube	1	5930325	12" yellow nyrod-inner	1
5931294	3/16" plastic bushing	1	5930719	12" blue nyrod-outer	1
5930435	3/16" diameter aluminum tube	1	1430020	#4-40 nylon insert hex nut	2
<b>WING/AILERON HARDWARE (BAG #3) - 6030503</b>					
0730091	#8-32x1" socket head cap screw	2	5930406	1/8" I.D. x 2" air line	1
0730073	#4-40x1/2" flat head machine screw	4	5931224	1/2"x3/4" wood dowel	1
0730075	#8-32x1/4" socket head screw	2	<b>UNIVERSAL NOSE GEAR BAG - 6030458 - REQUIRED OPTION</b>		
1410009	#4-40 hex nut	4	0730059	#8-32x3/4" socket head cap screw	1
1430478	#2-56 hex nut	2	0730072	#2-56x1/2" slotted pan head screw	1
1430482	nylon wing nut	2	0730107	#4-40x3/4" slotted pan head screw	1
2431020	nylon SK ball link, aileron	2	0730133	1/4"-28x3/4" flat head socket drive	1
2431030	Kwik Link, steel clevis	2	1430478	#2-56 hex nut	1
2431066	Kwik Link, steel clevis	4	1530325	3/32"x1" spring roll pin	2
2431073	male ball link #2-56 threaded end	2	1730008	#5144-18 "E"-ring	1
2431083	Loctite #243, blue	1	1730010	#5144-21 "E"-ring	1
			2131215	#180 return spring	1

Item No.	Description	Qty.
2131217	.045"x1-3/4" compression spring . . . . .	1
2431070	5/32" wheel collar with set screw . . . . .	1
2431081	1/2" O.D. x 1/4" lip "U" cup seal . . . . .	1
2431092	1/4" wheel collar with set screw . . . . .	1
2431118	nylon aileron connector . . . . .	1
2431204	5/16"x1-1/4" threaded axle . . . . .	1
5930186	steel uplock . . . . .	1
5930194	nylon piston rod end . . . . .	1
5930209	molded air cylinder . . . . .	1
5930345	5/8"x3-1/4" chromed tube . . . . .	1
5930377	molded knees top and bottom (pair) . . . . .	1
5930378	molded upper strut . . . . .	1
5930424	"S" hook . . . . .	1
5930428	cylinder retainer . . . . .	1
5931142	aluminum upper strut steering arm . . . . .	1
5931204	molded gear bracket, trimmed . . . . .	1
5931230	molded lower strut, nose . . . . .	1
6030228	nose gear pivot axle assembly . . . . .	1
<b>GEAR DOORS (BAG #7) - 6030501</b>		
2431010	small hinge point, nylon with steel pin . . . . .	4
2431020	nylon socket ball link . . . . .	4

Item No.	Description	Qty.
2431028	#2-56x4" rod threaded one end . . . . .	2
2431073	male ball link #2-56 thread . . . . .	4
2431145	3/16" wheel collar with set screw . . . . .	2
5931299	1/32"x4"x9-1/2" sheet ply . . . . .	1
5931300	1/8"x3/4" brass tube . . . . .	2
5931301	.020 diameter x 2' copper wire . . . . .	1
1330060	#8 steel flat washer . . . . .	2
0730097	#4-40x1/2" slotted pan head bolt . . . . .	8

**HARDWARE (BAG #8) - 6030508**

0730038	#14 screw, eye, open 1/4" . . . . .	6
0730065	#2x3/8" slotted pan head screw . . . . .	16
2431044	9/64" #8 ball driver . . . . .	1
2431052	awl . . . . .	1
2431139	1/8"x3-5/8" small nylon cable ties . . . . .	10
2431146	#64 rubber bands . . . . .	4
5931213	18"x24"x6 oz. glass cloth . . . . .	1
1430500	#8-32 blind "T" nuts (for engine former) . . . . .	4
5931320	3/32"x1-1/4" diameter ply circle . . . . .	1
2431083	Loctite #242 .02 fl oz . . . . .	1

**OPTIONS**

6130192	Custom retractable nose gear (required) . . . . .	1
2630028	Rhom Air mains with 3/16" struts . . . . .	1
6130107	Sure Flow fuel manifold . . . . .	1