Wingtip missle rail (make 2 from 1/4" x 3/8" balsa)

Fwd fuselage top
(Make 1)

Canopy
(Make 8 and laminate)

Canopy lid piece
(Make 4)

Turtledeck top
(Make 2)

Aft fuselage top doubler 2
(Make 2)

Aft fuselage top doubler 1
(Make 2)

Canopy top template to aid carving

Fwd fuselage top doubler 2
(Make 2)

Fwd fuselage top doubler 1
(Make 2)

Nosecone top template
to aid shaping

Nosecone
(Make 10 and laminate)

Dashed green lines indicate doublers

F1

F2

F3

F4

Fwd fuselage side
(Make 2)

Fwd fuselage bottom doubler 1
(Make 2)

Fwd fuselage bottom doubler 2
(Make 2)

F1

F2

F3

F4

To make the canard strong enough, either:
1) Make the entire canard from 3/16" sheet balsa
2) Make from foam but edge-wrap with hard balsa as shown
3) Make from foam and fiberglass the top and bottom

Extra edge reinforcement

Canard
(Make 2)

Red dashed lines indicate strake design for non-canard Su-30 variants

Wing fillet lamination 1
(Make 2)

Wing fillet lamination 3
(Make 2)

Wing fillet lamination 2
(Make 2)

Canard braces (6 deg dihedral)
(Make 4 from 1/32" ply)

Front spar = 1 1/2"
from wing LE
(at root chord)

Wing
(Make 1)

.22" carbon tube spar

Internal mid-top
(Make 2)

Mid doubler
top plans
(Make 2 from
3mm Depron)

Mid doubler
bottom plans
(Make 2 from
3mm Depron)

Stabilators
(Make 2)

Extra edge reinforcement for control servo

Cut slot for .22" carbon
tube pivots

Place 1" wide strip of fiberglass
chordwise at root (top and bottom)

Forward fuselage bottom
(Make 1)

Splice wing here to fit
on one sheet of Depron

Cut slots to fit tabs in
nacelle sides (typical)

Red dashed lines indicate strake design for non-canard Su-30 variants

Insert 1/32" ply
doubler here
(plans 4 of 4)

Red dashed lines indicate strake design for non-canard Su-30 variants

26" Span Version

Outboard nacelle side
(Make 2)

.75" square x 1/16" ply bearing supports

Trim as shown for twin motor installation

Inboard nacelle side
(Make 2)

.75" square x 1/16" ply bearing supports

Nacelle bottom
(Make 2)

Nacelle top doubler 1
(Make 4)

Nacelle top doubler 2
(Make 4)

Fuselage side rails
(Make 4)

Nacelle bottom doubler 1 - Inboard
(Make 2)

Nacelle bottom doubler 2 - Inboard
(Make 2)

Glue this surface down to fin doubler surface

Vertical tail
(Make 2)

Rudder control horns
(make 2 from 1/32" plywood)

Glue one doubler to
control horn as shown

Stabilator control horn
(Make 2 from 1/16" ply)

1/2" dia.

Stabilator control horn
doublers/anti stops
(Make 6 from 1/16" ply)

Epoxy to motor
arm here

Epoxy to motor
arm here

Side plates for thrust
vectoring motor mount
(Make 2 each from 1/8" ply)

Note: If using a motor other than the LSPJ, modify the height of the side plates to ensure the centerline of the motor is aligned with the pivot bolt (to minimize strain on the servo)

2.91"

0.22"

1.30"

1/8" O.D. brass tube bearing with
3-48 bolt pivot (secure with nut)

Main motor mount stick
(3/8" sq hardwood)

Trim end as required.
Total length = 6"

Movable portion of
motor mount stick
(3/8" sq hardwood)

Nacelle bottom doubler 1 - Outboard
(Make 2)

Nacelle bottom doubler 2 - Outboard
(Make 2)

Outboard

Inboard

Nacelle tops
(Make 2)

(trim per plans 2 of 4)

(trim per plans 2 of 4)

Aft doubler (1 req'd)
(cut from 1/16" ply)

1/2" dia. hole

Su-37 Super Flanker Park Jet

Designed by Steve Shumate

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All parts made from 6mm Depron or BlueCore foam unless otherwise specified