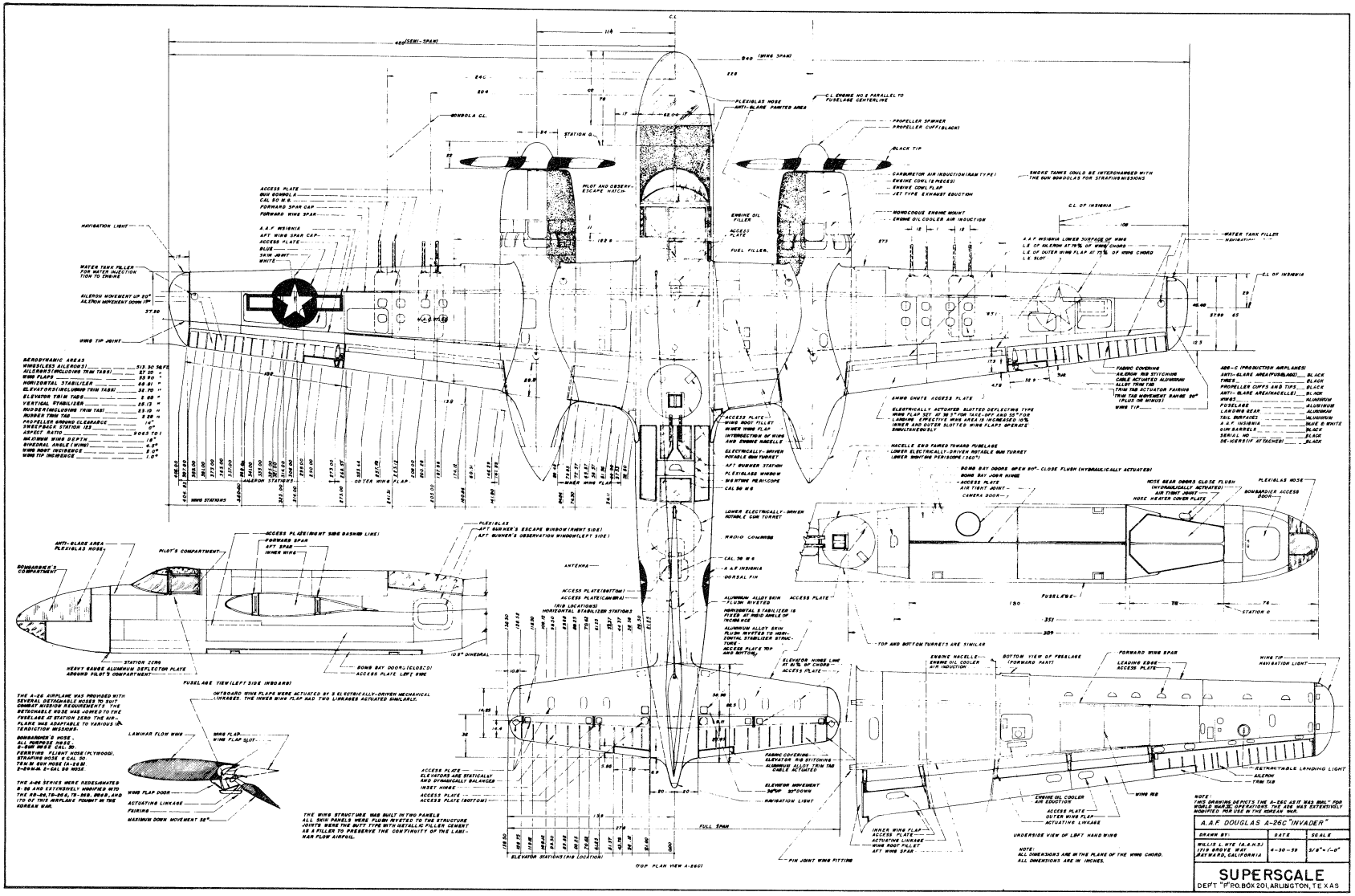
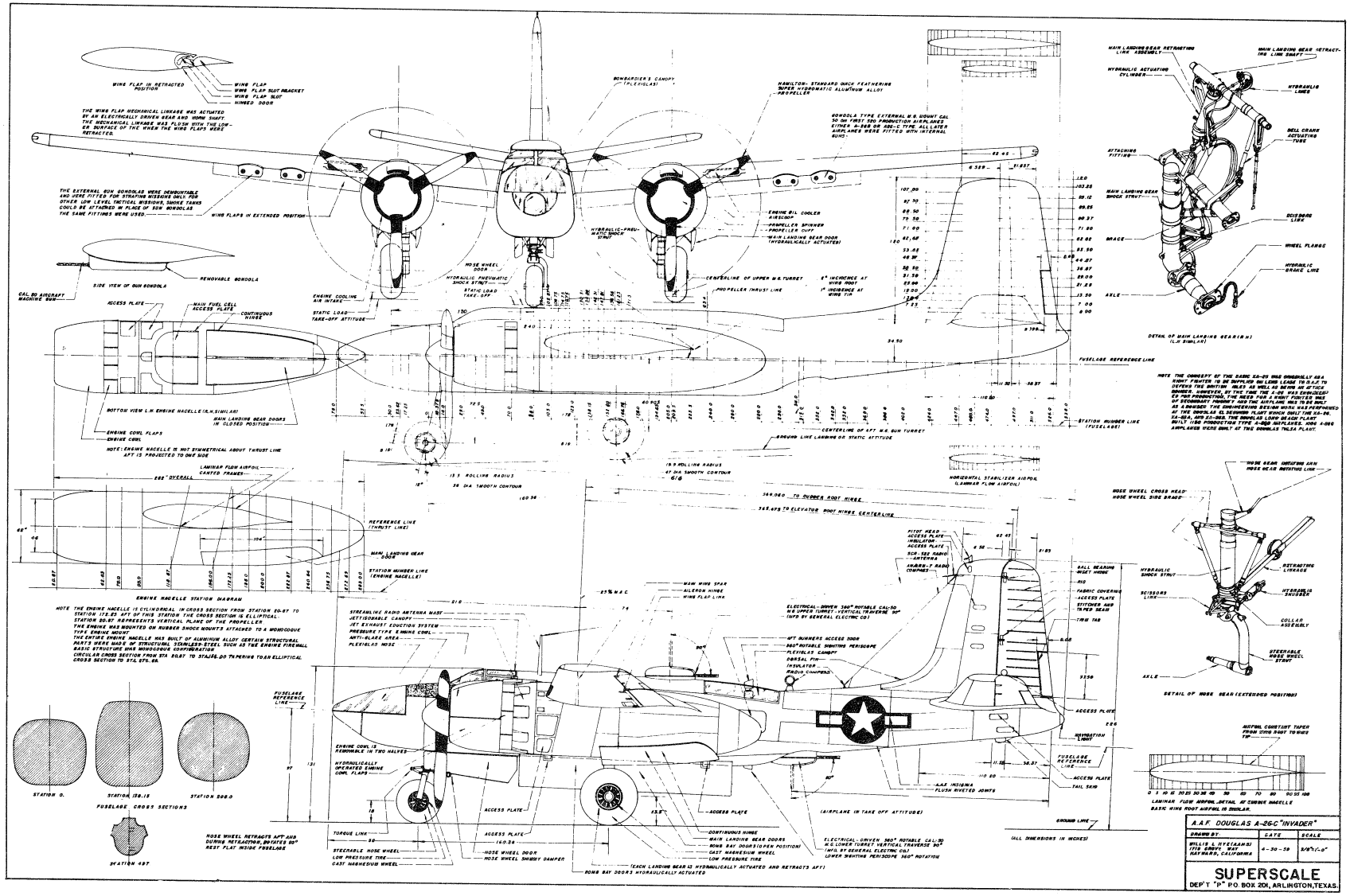

A.A.F. DOUGLAS A-26C "INVADER"
DRAWN BY: WILLIS L. HYE (A.A.N.S.)
1719 GROVE AVE.
REDWOOD, CALIFORNIA
DATE 4-30-59
SCALE 3/8" = 1'-0"
SUPERSCALE
DEPT "F" P.O. BOX 201, ARLINGTON, TEXAS
NOTE: THIS DRAWING DEPICTS THE A-26C AS IT WAS BUILT FOR WORLD WAR II OPERATIONS. THE A26 WAS EXTENSIVELY MODIFIED FOR USE IN THE KOREAN WAR.
NOTE: ALL DIMENSIONS ARE IN THE PLANE OF THE WING CHORD. ALL DIMENSIONS ARE IN INCHES.
AERODYNAMIC AREAS
WINGS (NO AILERONS) 513.50 SQ.FT.
AILERONS (INCLUDING TRIM TABS) 67.50 "
WING FLAPS 33.90 "
HORIZONTAL STABILIZER 88.90 "
ELEVATORS (INCLUDING TRIM TABS) 33.70 "
ELEVATOR TRIM TABS 2.80 "
VERTICAL STABILIZER 28.13 "
RUDDER (INCLUDING TRIM TAB) 23.10 "
RUDDER TRIM TAB 2.50 "
PROPELLER GROUND CLEARANCE 16"
SWEEPBACK STATION 183 5°
ASPECT RATIO 9.06 (TOT)
MAXIMUM WING DEPTH 18"
DIHEDRAL ANGLE (WING) 6.5°
WING ROOT INCIDENCE 2.0°
WING TIP INCIDENCE 1.0°
A26-C (PRODUCTION AIRPLANES)
ANTI-GLARE AREA (FUSELAGE) BLACK
TIRES BLACK
PROPELLER CUFFS AND TIPS BLACK
ANTI-GLARE AREA (NACELLE) BLACK
WHEEL ALUMINUM
FUSELAGE ALUMINUM
LANDING GEAR ALUMINUM
TAIL SURFACES ALUMINUM
A.A.F. INSIGNIA BLUE & WHITE
GUN BARRELS BLACK
SERIAL NO. BLACK
DE-ICERS (IF ATTACHED) BLACK
FUSELAGE VIEW (LEFT SIDE INBOARD)
TOP PLAN VIEW A-26C
UNDERSIDE VIEW OF LEFT HAND WING
BOTTOM VIEW OF FUSELAGE (FORWARD PART)
THE A-26 AIRPLANE WAS PROVIDED WITH SEVERAL DETACHABLE NOSES TO SUIT COMBAT MISSION REQUIREMENTS. THE RETRACTABLE NOSE WAS JOINED TO THE FUSELAGE AT STATION ZERO. THE AIRPLANE WAS ADAPTABLE TO VARIOUS INTERDICTION MISSIONS.
BOMBARDIER'S NOSE
2-50 CAL. MG'S & 2-20 MM CAL. 50 FERRYING FLIGHT NOSE (PLYWOOD)
STRAFING NOSE 4 CAL. 50 TRAIN. GUN NOSE (A-26B) 2-20 MM & 4-CAL. 50 NOSE
THE A-26 SERIES WERE REDESIGNATED B, 50 AND EXTENSIVELY MODIFIED INTO THE RB-26, TB-26B, TB-26C, AND ITS OF THIS AIRPLANE FOUGHT IN THE KOREAN WAR.
THE WING STRUCTURE WAS BUILT IN TWO PANELS. ALL SKIN PANELS WERE FLUSH RIVETED TO THE STRUCTURE JOINTS WERE THE BUTT TYPE WITH DETACHABLE FILLER CENTERS AS A FILLER TO PRESERVE THE CONTINUITY OF THE LAMINAR FLOW AIRFOIL.
OUTBOARD WING FLAPS WERE ACTUATED BY 2 ELECTRICALLY-DRIVEN MECHANICAL LINKAGES. THE INNER WING FLAP HAD TWO LINKAGES ACTUATED SIMULARLY.
LAMINAR FLOW WING
WING FLAP
WING FLAP SLOT
WING FLAP DOOR
ACTUATING LINKAGE
FAIRING
MAXIMUM DOWN MOVEMENT 38°
WING STATIONS
ELEVATOR STATIONS (TRIB LOCATION)
FULL SPAN
PIN JOINT WING FITTING
FUSELAGE
TOP AND BOTTOM TURRETS ARE SIMILAR
STATION 0
STATION ZERO
HEAVY GAUGE ALUMINUM DEFLECTOR PLATE AROUND PILOT'S COMPARTMENT
BOMB BAY DOOR (CLOSED)
ACCESS PLATE LAPS SIDE
10.5° DIHEDRAL
ANTENNA
WING TIP NAVIGATION LIGHT
RETRACTABLE LANDING LIGHT
AILERON
TRIM TAB
WING RIB
ENGINE OIL COOLER AIR EJECTION
ACCESS PLATE
OUTER WING FLAP
ACTUATING LINKAGE
INNER WING FLAP
WING ROOT FILLET
AFT WING SPAR
FORWARD WING SPAR
LEADING EDGE ACCESS PLATE
ENGINE NACELLE
ENGINE OIL COOLER AIR INDUCTION
BOMBARDIER'S COMPARTMENT
PILOT'S COMPARTMENT
ANTI-GLARE AREA
PLEXIGLAS NOSE
ACCESS PLATE (RIGHT SIDE DASHED LINE)
FORWARD SPAR
AFT SPAR
INNER WING
PLEXIGLAS
AFT GUNNER'S ESCAPE WINDOW (RIGHT SIDE)
AFT GUNNER'S OBSERVATION WINDOW (LEFT SIDE)
RADIO COMPASS
CAL 50 M G
A.A.F. INSIGNIA
DORSAL FIN
ACCESS PLATE (BOTTOM)
ACCESS PLATE (CAMERA)
(RIB LOCATIONS)
HORIZONTAL STABILIZER STATIONS
ALUMINUM ALLOY SKIN FLUSH RIVETED
ACCESS PLATE
HORIZONTAL STABILIZER IS FIXED AT MID SPAN OF INCIDENCE
ALUMINUM ALLOY SKIN FLUSH RIVETED TO HORIZONTAL STABILIZER STRUCTURE
ACCESS PLATE TOP AND BOTTOM
ELEVATOR HINGE LINE AT 25 % OF CHORD
ACCESS PLATE
ACCESS PLATE
ELEVATORS ARE STATICALLY AND DYNAMICALLY BALANCED
INSET HINGE
ACCESS PLATE
ACCESS PLATE (BOTTOM)
FABRIC COVERING
ELEVATOR RIB STITCHING
ALUMINUM ALLOY TRIM TAB CABLE ACTUATED
ELEVATOR MOVEMENT 30° UP 20° DOWN
NAVIGATION LIGHT
NACELLE END FAIRED TOWARD FUSELAGE
LOWER ELECTRICALLY-DRIVEN ROTABLE GUN TURRET
LOWER SIGHTING PERISCOPE (360°)
BOMB BAY DOORS OPEN 90° - CLOSE FLUSH (HYDRAULICALLY ACTUATED)
ACCESS PLATE
AIR TIGHT JOINT
CAMERA DOOR
NOSE GEAR DOORS CLOSE FLUSH (HYDRAULICALLY ACTUATED)
AIR TIGHT JOINT
NOSE HEATER COVER PLATE
PLEXIGLAS NOSE
BOMBARDIER ACCESS DOOR
WATER TANK FILLER
NAVIGATION LIGHT
A.A.F. WSIGNIA LOWER SURFACE OF WING
L.E. OF AILERON AT 79% OF WING CHORD
L.E. OF OUTER WING FLAP AT 17% OF WING CHORD
L.E. SLOT
FABRIC COVERING
AILERON RIB STITCHING
CABLE ACTUATED ALUMINUM ALLOY TRIM TAB
TRIM TAB ACTUATOR FAIRING
TRIM TAB MOVEMENT RANGE 90° (PLUS OR MINUS)
WING TIP
AMMO CHUTE ACCESS PLATE
ELECTRICALLY ACTUATED SLOTTED DEFLECTING TYPE WING FLAP SET AT 30.5° FOR TAKE-OFF AND 55° FOR LANDING. EFFECTIVE WING AREA IS INCREASED 10% INNER AND OUTER SLOTTED WING FLAPS OPERATE SIMULTANEOUSLY
ACCESS PLATE
WING ROOT FILLET
INNER WING FLAP
INTERSECTION OF WING AND ENGINE NACELLE
ELECTRICALLY-DRIVEN ROTABLE GUN TURRET
AFT GUNNER STATION
PLEXIGLAS WINDOW
MERTING PERISCOPE
CAL 50 M G
LOWER ELECTRICALLY-DRIVEN ROTABLE GUN TURRET
ENGINE OIL FILLER
ACCESS PLATE
FUEL FILLER
HONEYCOMB ENGINE MOUNT
ENGINE OIL COOLER AIR INDUCTION
CARBURETOR AIR INDUCTION (RAM TYPE)
ENGINE COWL (2 PIECES)
ENGINE COWL FLAP
JET TYPE EXHAUST EJECTION
PROPELLER SPINNER
PROPELLER CUFF (BLACK)
BLACK TIP
SMOKE TANKS COULD BE INTERCHANGED WITH THE GUN GONDOLAS FOR STRAFING MISSIONS
PLEXIGLAS NOSE
ANTI-GLARE PAINTED AREA
C.L. ENGINE NOSE PARALLEL TO FUSELAGE CENTERLINE
GONDOLA C.L.
STATION 0
ACCESS PLATE
GUN GONDOLA
CAL 50 M G
FORWARD SPAR CAP
FORWARD WING SPAR
A.A.F. WSIGNIA
AFT WING SPAR CAP
ACCESS PLATE
BLUE
SKIN JOINT
WHITE
NAVIGATION LIGHT
WATER TANK FILLER FOR WATER INJECTION TO ENGINE
AILERON MOVEMENT UP 20° AILERON MOVEMENT DOWN 15°
WING TIP JOINT
C.L. OF INSIGNIA
C.L. OF INSIGNIA
C.L.
(SEMI-SPAN)
(WING SPAN)


WING FLAP IN RETRACTED POSITION
WING FLAP
WING FLAP SLOT BRACKET
WING FLAP SLOT
HINGED DOOR
THE WING FLAP MECHANICAL LINKAGE WAS ACTUATED BY AN ELECTRICALLY DRIVEN GEAR AND WORM SHAFT. THE MECHANICAL LINKAGE WAS FLUSH WITH THE LOWER SURFACE OF THE WING WHEN THE WING FLAPS WERE RETRACTED.
THE EXTERNAL GUN GONDOLAS WERE DEMOUNTABLE AND WERE FITTED FOR STRAFING MISSIONS ONLY. FOR OTHER LOW LEVEL TACTICAL MISSIONS, SMOKE TANKS COULD BE ATTACHED IN PLACE OF GUN GONDOLAS THE SAME FITTINGS WERE USED.
WING FLAPS IN EXTENDED POSITION
SIDE VIEW OF GUN GONDOLA
REMOVABLE GONDOLA
CAL 50 AIRCRAFT MACHINE GUN
ACCESS PLATE
MAIN FUEL CELL ACCESS PLATE
CONTINUOUS HINGE
BOMBARDIER'S CANOPY (PLEXIGLAS)
HAMILTON- STANDARD QUICK FEATHERING SUPER HYDROMATIC ALUMINUM ALLOY PROPELLER
GONDOLA TYPE EXTERNAL M.G. MOUNT CAL 50 ON FIRST 120 PRODUCTION AIRPLANES EITHER A-26B OR A26-C TYPE. ALL LATER AIRPLANES WERE FITTED WITH INTERNAL GUNS.
ENGINE OIL COOLER AIRSCOOP
PROPELLER SPINNER
PROPELLER CUFF
MAIN LANDING GEAR DOOR (HYDRAULICALLY ACTUATED)
HYDRAULIC-PNEUMATIC SHOCK STRUT
NOSE WHEEL DOOR
HYDRAULIC PNEUMATIC SHOCK STRUT
STATIC LOAD TAKE-OFF
ENGINE COOLING AIR INTAKE
STATIC LOAD TAKE-OFF ATTITUDE
CENTERLINE OF UPPER M.G. TURRET
PROPELLER THRUST LINE
8° INCIDENCE AT WING ROOT
1° INCIDENCE AT WING TIP
MAIN LANDING GEAR RETRACTING LINK ASSEMBLY
MAIN LANDING GEAR RETRACTING LINK SHAFT
HYDRAULIC ACTUATING CYLINDER
HYDRAULIC LINES
BELL CRANK ACTUATING TUBE
ATTACHING FITTING
MAIN LANDING GEAR SHOCK STRUT
SCISSORS LINK
BRACE
WHEEL FLANGE
HYDRAULIC BRAKE LINE
AXLE
DETAIL OF MAIN LANDING GEAR (R.H.)
(L.H. SIMILAR)
FUSELAGE REFERENCE LINE
STATION NUMBER LINE (FUSELAGE)
CENTERLINE OF AFT M.G. GUN TURRET
GROUND LINE (LANDING OR STATIC ATTITUDE)
BOTTOM VIEW L.H. ENGINE NACELLE (R.H. SIMILAR)
MAIN LANDING GEAR DOORS IN CLOSED POSITION
ENGINE COWL FLAPS
ENGINE COWL
NOTE: ENGINE NACELLE IS NOT SYMMETRICAL ABOUT THRUST LINE AFT IS PROJECTED TO ONE SIDE
LAMINAR FLOW AIRFOIL
CANTED FRAMES
OVERALL
REFERENCE LINE (THRUST LINE)
MAIN LANDING GEAR DOOR
STATION NUMBER LINE (ENGINE NACELLE)
ENGINE NACELLE STATION DIAGRAM
NOTE THE ENGINE NACELLE IS CYLINDRICAL IN CROSS SECTION FROM STATION 80.87 TO STATION 172.25 AFT OF THIS STATION THE CROSS SECTION IS ELLIPTICAL. STATION 80.87 REPRESENTS VERTICAL PLANE OF THE PROPELLER. THE ENGINE WAS MOUNTED ON RUBBER SHOCK MOUNTS ATTACHED TO A MONOCOQUE TYPE ENGINE MOUNT. THE ENTIRE ENGINE NACELLE WAS BUILT OF ALUMINUM ALLOY CERTAIN STRUCTURAL PARTS WERE MADE OF STRUCTURAL STAINLESS-STEEL SUCH AS THE ENGINE FIREWALL. BASIC STRUCTURE WAS MONOCOQUE CONFIGURATION CIRCULAR CROSS SECTION FROM STA 80.87 TO STA 86.00 TAPERING TO AN ELLIPTICAL CROSS SECTION TO STA 172.25.
HORIZONTAL STABILIZER AIRFOIL (LAMINAR FLOW AIRFOIL)
TO RUDDER ROOT HINGE
TO ELEVATOR ROOT HINGE CENTERLINE
NOSE WHEEL CROSS HEAD
NOSE WHEEL SIDE BRACE
NOSE GEAR CUTOFF (ON NOSE GEAR RETRACTING LINE)
RETRACTING LINKAGE
HYDRAULIC SHOCK STRUT
SCISSORS LINK
HYDRAULIC SNUBBER
COLLAR ASSEMBLY
STEERABLE NOSE WHEEL STRUT
AXLE
DETAIL OF NOSE GEAR (EXTENDED POSITION)
STATION 0.
STATION 138.18
STATION 206.0
FUSELAGE CROSS SECTIONS
STATION 497
NOSE WHEEL RETRACTS AFT AND DURING RETRACTION, ROTATES 90° REST FLAT INSIDE FUSELAGE
FUSELAGE REFERENCE LINE
ENGINE COWL IS REMOVABLE IN TWO HALVES
HYDRAULICALLY OPERATED ENGINE COWL FLAPS
TORQUE LINK
STEERABLE NOSE WHEEL
LOW PRESSURE TIRE
CAST MAGNESIUM WHEEL
ACCESS PLATE
NOSE WHEEL DOOR
NOSE WHEEL SHIMMY DAMPER
(EACH LANDING GEAR IS HYDRAULICALLY ACTUATED AND RETRACTS AFT)
BOMB BAY DOORS HYDRAULICALLY ACTUATED
CONTINUOUS HINGE
MAIN LANDING GEAR DOORS
BOMB BAY DOORS (OPEN POSITION)
CAST MAGNESIUM WHEEL
LOW PRESSURE TIRE
ELECTRICAL-DRIVEN 360° ROTABLE CAL.50 M.G. LOWER TURRET VERTICAL TRAVERSE 90° (MFG. BY GENERAL ELECTRIC CO.) LOWER SIGHTING PERISCOPE 360° ROTATION
(AIRPLANE IN TAKE OFF ATTITUDE)
(ALL DIMENSIONS IN INCHES)
MAIN WING SPAR
AILERON HINGE
WING FLAP LINK
STREAMLINE RADIO ANTENNA MAST
JETTISONABLE CANOPY
JET EXHAUST EJECTION SYSTEM
PRESSURE TYPE ENGINE COWL
ANTI-GLARE AREA
PLEXIGLAS NOSE
ELECTRICAL-DRIVEN 360° ROTABLE CAL.50 M.G. UPPER TURRET VERTICAL TRAVERSE 90° (MFG. BY GENERAL ELECTRIC CO.)
AFT GUNNERS ACCESS DOOR
360° ROTABLE SIGHTING PERISCOPE
PLEXIGLAS CANOPY
DORSAL FIN
INSULATOR
RADIO COMPASS
PITOT HEAD
ACCESS PLATE
INSULATOR
ACCESS PLATE
SCR-522 RADIO ANTENNA
INDRS-7 RADIO COMPASS
BALL BEARING WRIST HINGE
RIG
FABRIC COVERING
ACCESS PLATE
STITCHER AND TAPED SEAM
TRIM TAB
ACCESS PLATE
NAVIGATION LIGHT
FUSELAGE REFERENCE LINE
ACCESS PLATE
TAIL SKID
A.A.F. INSIGNIA
FLUSH RIVETED JOINTS
GROUND LINE
AIRFOIL CONSTANT TAPER FROM 12.0% ROOT TO 9.0% TIP
LAMINAR FLOW AIRFOIL DETAIL AT CENTER NACELLE
BASIC WING ROOT AIRFOIL IS SIMILAR.
A.A.F. DOUGLAS A-26-C "INVADER"
DRAWN BY: WILLIS A. HYTE (ADAMS) 1710 SMITH WAY HAYWARD, CALIFORNIA
DATE 4-30-59
SCALE 3/8"=1'-0"
SUPERSCALE
DEP'T "P" P.O. BOX 201, ARLINGTON, TEXAS.