POH UPDATES
DIGITAL DISTRIBUTION

Visit https://robinsonheli.com to view Pilot's Operating Handbook's current status. Revisions to the POH can be printed on statement-size paper; or in booklet format on 8.5″ x 11″ paper and cut in half (two pages per sheet). If printing the booklet format on 8.5 x 11″ paper, use the following options:

- Actual size
- Portrait orientation
- Two-sided
- Flip on short edge

Note: The date stamped below reflects the revision of this handbook at the time it was assembled. Please refer to https://robinsonheli.com for date of most recent revision.

Assembled: _____ Lot: _____

Aircraft owner name: _____

Owner address: _____

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Phone: _____

E-mail: _____

Aircraft serial number: _____

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STEVEN THOMAS NASSAU

Digitally signed by STEVEN THOMAS NASSAU
Date: 2025.05.14 09:58:55 -07'00'

FTP, AIR-713, For

14 May 25

Manager, Flight Test & Human Factors Branch, AIR-710 Date

Federal Aviation Administration

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SECTION 9

SUPPLEMENTS

OPTIONAL EQUIPMENT SUPPLEMENTS

Information contained in the following supplements applies only when the related equipment is installed.

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NON-U.S. SUPPLEMENTS

The following supplements contain additional information required by certain countries:

Argentine Supplement	IAC AR Supplement
Brazilian Supplement	Israeli Supplement
Canadian Supplement	UK CAA Supplement
EASA Supplement	Ukrainian Supplement
FATA Supplement (Russia)	Uruguayan Supplement

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FAA APPROVED
R66 PILOT'S OPERATING HANDBOOK
PRESSURE FUELING SUPPLEMENT

This supplement must be included in the FAA-approved Pilot's Operating Handbook when the pressure-fueling system is installed.

Information contained herein supplements or supersedes the basic manual only in those areas listed in this supplement. For limitations, procedures, and performance information not contained in this supplement, consult the basic Pilot's Operating Handbook.

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*Manufacturer's data, not FAA-approved.

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REV NO	FAA APPROVAL	SUMMARY DESCRIPTION
IR	Nevada Ryan, Manager, AIR-716 30 NOV 2022	Initial release
1		Changed 40 gal to 25 gal
	STEVEN THOMAS NASSAU Digitally signed by STEVEN THOMAS NASSAU Date: 2025.06.12 11:52:19 -07'00' FTP, AIR 713 12 Jun 25	
	Manager, Flight Test & Human Factors Branch, AIR-710 Federal Aviation Administration Date	

SECTION 1: GENERAL

INTRODUCTION

This supplement contains changes and additional data applicable when the pressure-fueling system is installed. The pressure-fueling port is compatible with an Emco Wheaton J71 coupler.

SECTION 2: LIMITATIONS

PLACARDS

Near pressure-fueling port:

FUEL: GRADE JET A, JET A-1, JET B
OR AS SPECIFIED IN PILOT'S HANDBOOK

MAX PRESSURE: 50 PSI (3.5 BAR)

NO DEFUELING

SECTION 3: EMERGENCY PROCEDURES

RED WARNING INDICATORS

TANK PRESSURE (on pressure-fueling panel)	Indicates high pressure in fuel tank. Shut-off valve will latch closed preventing further fueling. Have maintenance personnel inspect system before flight.

AMBER CAUTION INDICATORS

VALVE OPEN (on pressure-fueling panel)	Indicates shut-off valves are open, allowing fuel flow from fueling port to fuel tank.

AUDIO ALERTS

"FUEL HOSE" sounds if collective is raised off down stop with a fuel hose connected to the fueling port.

SECTION 4: NORMAL PROCEDURES

DAILY OR PREFLIGHT CHECKS

Add to item 1, Pilot's Station:

Test tank pressure warning circuit.

Verify pressure fueling power switch is OFF.

NOTE

For tank pressure warning circuit test, turn pressure fueling power switch ON and press one test button. Verify red light illuminates and stays on. Turn pressure fueling power switch OFF and verify light turns off. Repeat for 2nd test button.

Add to item 2, Fuselage Right Side:

Verify fueling port cap (if installed) is secure.

NOTE

The cap is provided for protection from contamination in dirty environments or for long term non-use. Installation of the cap is not required for flight.

SECTION 4: NORMAL PROCEDURES (cont'd)

PRESSURE FUELING

To accept fuel at the pressure-fueling port: With collective full down, switch power ON at the pressure-fueling control panel and select desired quantity (full or 25 gallons) using the quantity switch. The VALVE OPEN light indicates that the shut-off valves are open, allowing fuel flow from the fueling port to the fuel tank. A shut-off valve will automatically close to stop fuel flow when fuel quantity reaches the selected level. To fuel to other quantities, switch pressure-fueling power OFF at the desired fuel level.

NOTE

The selectable fuel quantities are determined by float switches inside the fuel tank. Fueling on a non-level surface will affect actual fuel load.

TAKEOFF PROCEDURE

Verify fuel hose is disconnected before takeoff.

SECTION 5: PERFORMANCE

No change.

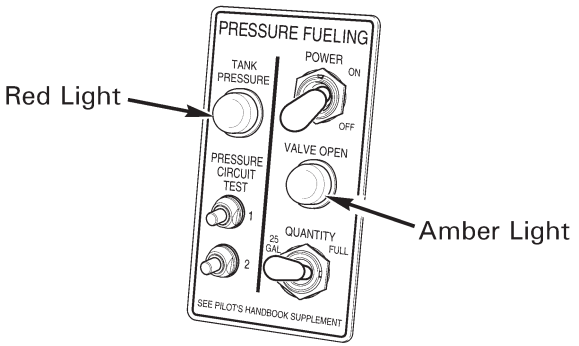
SECTION 6: WEIGHT AND BALANCE

No change.

SECTION 7: SYSTEMS DESCRIPTION

The pressure-fueling system consists of a fueling port on the right side of the fuselage, two shut-off valves in series just downstream of the port, a hose from the valves to an inlet at the top of the fuel tank, fuel tank level and pressure sensors, and a control panel on the instrument panel. The fueling port is compatible with an Emco Wheaton J71 dry-break coupler (recommended Emco Wheaton part no. J71C-AVN1-E004, which fits a fuel hose with a one-inch male NPT-threaded fitting).

Two shut-off valves are used to provide redundant protection against overfueling. Both valves must be open to allow fuel to flow. Each valve is connected to an independent float switch in the fuel tank to close the valve when the tank is full as well as an independent pressure switch to close the valve if fuel tank overpressure is detected. One of the valves is also connected to a second float switch to shut off at 25 gallons (95 liters).



TYPICAL CONTROL PANEL

The pressure-fueling control panel includes a power switch, a quantity selector switch, a VALVE OPEN light, and a TANK PRESSURE warning light with two test buttons for testing the overpressure warning circuits. The power switch enables refueling by providing power to open the two shut-off valves.

SECTION 7: SYSTEMS DESCRIPTION (cont'd)

The fuel cap should be installed during pressure fueling to prevent overflow. Fueling may be accomplished with or without engine running. If the helicopter is running, the collective must be on the down stop for the valves to operate. The VALVE OPEN light illuminates when both shut-off valves are open, indicating the system is ready to accept fuel. The TANK PRESSURE light illuminates when excessive pressure is detected in the fuel tank. Excessive pressure will latch a shut-off valve closed until power to the system is cycled.

The pressure-fueling system feeds fuel to the top of the main fuel tank. The system cannot be used for defueling and it will not add fuel to the optional auxiliary tank in the baggage compartment. Maximum allowable pressure for ground equipment connected to the fueling port is 50 psi (3.5 bar), which provides approximately 50 gallons per minute (190 liters per minute) fuel flow. Approximate flow rates at lower pressures are 30 gpm at 20 psi, 20 gpm at 10 psi, or 100 lpm at 1 bar.

The fueling port and recommended Emco Wheaton coupler are both dry-break fittings, allowing the external fueling equipment to be connected or disconnected without fuel spillage regardless of whether the shut-off valves are open or closed. A cap is provided which may be installed on the fueling port when the system is not in use.

An optical sensor near the fueling port will detect a fuel hose if the hose is connected to the port. If the collective is raised off the down stop while a hose is connected, a "fuel hose" audio alert will repeat in the headsets. The alert is muted 15 seconds after the collective is raised to prevent a distraction in case of a false alert.

CAUTION

The audio alert is only an aid. Do not rely on audio alert to verify hose is disconnected. Pilots must visually confirm fuel hose is disconnected and area is clear before takeoff.

SECTION 8: HANDLING AND MAINTENANCE

No change.

FAA APPROVED

R66 PILOT'S OPERATING HANDBOOK

GARMIN GFC 600H

This supplement must be included in the FAA-approved Pilot's Operating Handbook when the Garmin GFC 600H Helicopter Flight Control System is installed.

Information contained herein supplements or supersedes the basic manual only in those areas listed in this supplement. For limitations, procedures, and performance information not contained in this supplement, consult the basic Pilot's Operating Handbook.

LOG OF REVISIONS

REV NO	FAA APPROVAL	SUMMARY DESCRIPTION
IR	STEVEN THOMAS NASSAU 14 May 2025	Initial release
1		Configuration Version Update
	STEVEN THOMAS NASSAU Digitally signed by STEVEN THOMAS NASSAU Date: 2025.07.29 14:22:54 -0700' 29 JUL 25	
	Manager, Flight Test & Human Factors Branch, AIR-710 Federal Aviation Administration Date	

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* Manufacturer's data, not FAA approved

SECTION 1: GENERAL

INTRODUCTION

This supplement contains the changes and additional data applicable when the Garmin GFC 600H Helicopter Flight Control System (FCS) is installed.

APPLICABILITY

The following or later software versions must be installed for the Pilot's Operating Handbook (POH) revision to be applicable to the installation:

Configuration	Version
Standard R66	415802
Pop-out Float Equipped R66	415803

NOTE

This section is not intended to be a comprehensive list of approved software. It is intended to provide a means to determine if this Pilot Operating Handbook Supplement revision is applicable to the software that is installed in the rotorcraft. Do not use this Pilot Operating Handbook Supplement revision if the installation has a software version less than that shown above.

GARMIN GFC 600H

The GFC 600H maintains a pilot-selected rotorcraft attitude by providing inputs to the cyclic and (optional) pedals. In hover and taxi, the system provides hover position hold and ground-speed hold. In cruise flight, the system provides upper level modes including holding selected airspeed, vertical speed, altitude, heading, and tracking GPS or VHF lateral and vertical navigation signals.

SECTION 1: GENERAL (cont'd)

GARMIN GFC 600H (cont'd)

Additionally, the GFC 600H provides safety enhancing functions including single button engagement to a safe flight attitude (Level mode), tactile feedback to the pilot when certain attitude, airspeed, or G limits are exceeded (Limit Cueing), and protection from inadvertent exceedance of V_{NE}.

FCS modes are selected using controls on the GMC 605H Mode Controller, cyclic grip, and under the pilot's collective. System status and operating modes are shown on the GMC 605H Mode Controller and GDU 1060/700 TXi display.

Refer to the Garmin GFC 600H Pilot's Guide, Garmin Document number 190-02602-00, for a detailed description of the system and its components.

CAUTION

The FCS system is intended to enhance safety by reducing pilot workload. It is not a substitute for adequate pilot skill nor does it relieve the pilot of the responsibility to monitor the flight controls and maintain adequate outside visual reference.

SECTION 2: LIMITATIONS

FLIGHT AND MANEUVER LIMITATIONS

Pilot's hand must be on the cyclic grip and feet on the tail rotor pedals (if optional yaw control system is installed) under any of the following conditions:

During FCS engagement or intentional disengagement

When HOV/GSPD modes are engaged

At altitudes less than 300 feet AGL

When AHRS DGRD message is displayed on the GMC 605H

Use of all upper level modes except APR are limited to altitudes above 300 feet AGL.

For practice instrument approaches, minimum altitude for use of APR mode is 50 feet AGL.

Flight is prohibited if "PFT" is indicated on the GMC 605H.

KINDS OF OPERATION LIMITATIONS

Installation of FCS does not change the kinds of operations approved. Installation of the FCS does not approve IFR operations.

EXTERNAL LOAD

For External Load Operation including flight with any combination of large bubble doors, FCS must pass PFT and be DISENGAGED.

SECTION 2: LIMITATIONS (cont'd)

POP-OUT FLOATS

For operations with pop-out floats inflated, FCS must pass PFT and be DISENGAGED.

COUPLED STEEP APPROACHES

GFC 600H coupled approaches in GS or GP mode with glidepath angles greater than 6 degrees are prohibited.

PLACARDS

In clear view of the pilot:

CYCLIC LIMIT CUEING PROVIDES RESISTANCE TO INPUTS AT CERTAIN AIRSPEEDS AND ATTITUDES. PRESS AND HOLD FCS OFF TO DISABLE. SEE POH SUPPLEMENT.

SECTION 3: EMERGENCY PROCEDURES

The following emergency procedures incorporate changes to existing procedures in the R66 Pilot's Operating Handbook. The name of each procedure corresponds to the procedure in the basic Pilot's Operating Handbook.

NOTE

If time does not permit disengagement of FCS, pressing and holding FTR will relieve control forces.

POWER FAILURE ABOVE 500 FEET AGL

1. Power Failure Above 500 Feet AGL Procedure – Apply

NOTE

FCS may be used in attitude mode during autorotative glide if desired. FCS may provide undesirable feedback during cyclic flare and landing. If time permits, disengage FCS prior to cyclic flare, or press and hold FTR to relieve forces.

POWER FAILURE BETWEEN 8 FEET AND 500 FEET AGL

1. Power Failure Between 8 Feet and 500 Feet AGL Procedure – Apply

NOTE

FCS may be used in attitude mode during autorotative glide if desired. FCS may provide undesirable feedback during cyclic flare and landing. If time permits, disengage FCS prior to cyclic flare, or press and hold FTR to relieve forces.

SECTION 3: EMERGENCY PROCEDURES (cont'd)

POWER FAILURE BELOW 8 FEET AGL

1. Power Failure Below 8 Feet AGL Procedure – Apply
2. FCS – If time permits, disengage.

LOSS OF TAIL ROTOR THRUST IN FORWARD FLIGHT

1. Loss of Tail Rotor Thrust in Forward Flight Procedure – Apply
2. FCS – If time permits, disengage.

LOSS OF TAIL ROTOR THRUST IN HOVER

1. Loss of Tail Rotor Thrust in Hover Procedure – Apply
2. FCS – If time permits, disengage.

HEADSET AUDIO FAILURE

1. Headset Audio Failure Procedure – Apply
2. Disengage FCS. Pilot will not hear FCS aural annunciations with a failed headset.

ENGINE FIRE IN FLIGHT

1. Engine Fire in Flight Procedure – Apply
2. FCS – If time permits, disengage.

ELECTRICAL FIRE

1. FCS – Disengage
2. Electrical Fire Procedure – Apply

HYDRAULIC SYSTEM FAILURE

1. FCS – Disengage
2. Hydraulic System Failure Procedure – Apply

NOTE

FCS does not have sufficient authority to overcome cyclic control forces of a hydraulics system failure.

SECTION 3: EMERGENCY PROCEDURES (cont'd)

The following emergency procedures are new procedures not in the basic R66 Pilot's Operating Handbook.

FCS MALFUNCTION

If the helicopter deviates unexpectedly from the planned flight path or if control forces or motion are abnormal:

1. Cyclic and pedals – Hold firmly.
2. Maintain manual control of rotorcraft attitude.
3. Cyclic FCS OFF – Press and hold.
4. Verify FCS is disconnected.
5. If FCS still engaged, GMC 605H FCS key – Press and hold.
6. Verify FCS is disconnected.
7. If FCS is still engaged, AUTOPILOT FCS Circuit Breaker – Pull.
8. Verify FCS is disconnected.
9. If FCS cannot be disengaged, land as soon as practical.

NOTE

AUTOPILOT FCS circuit breaker is marked with a red collar for easy identification. If power to the FCS servos is lost or turned off via circuit breaker, then cyclic control forces will be slightly higher than normal.

SECTION 3: EMERGENCY PROCEDURES (cont'd)

FCS FAILURE / ABNORMAL DISCONNECT

FCS failure is indicated by a red LED next to the FCS key on the GMC 605H Mode Controller, aural tone, "FCS FAIL" displayed on GMC 605H, or "FCS" displayed on the Primary Flight Display (PFD) in red.

1. Cyclic and pedals – Hold firmly.
2. Maintain manual control of rotorcraft attitude.
3. Cyclic FCS OFF – Press and release.

NOTE

If no failure indications (red LED) are present on the GMC 605H Mode Controller, then the pilot may attempt to re-engage the FCS by pressing and releasing the GMC 605H FCS key.

NOTE

If after failure of the FCS the GFS 83 servos are still functional, they will retain the cyclic in its position at the time of the failure. As soon as the pilot moves the cyclic out of the detent the forces will be removed.

CYCLIC CONTROL JAM

If cyclic forces are excessive or cyclic appears to be jammed:

1. Cyclic – Grip firmly.
2. Cyclic FCS OFF – Press and hold.
3. If controls still appear to be jammed, apply load to cyclic as required to break shear fuse.
4. Land as soon as practical.

CAUTION

Minimize slow airspeed maneuvering. If winds are in excess of 15 KTS, land into the wind.

NOTE

After breaking a shear fuse, control forces will be higher than normal.

SECTION 3: EMERGENCY PROCEDURES (cont'd)

YAW AXIS FAILURE (IF INSTALLED)

If aural "YAW FAIL" annunciates and "YAW FAIL" displayed on GMC 605H and PFD:

1. Maintain manual control of yaw axis through manual inputs.
2. Set pitch and roll FCS modes as desired.

TAIL ROTOR PEDAL CONTROL JAM

If tail rotor pedal forces are excessive or pedals appear to be jammed:

1. Tail rotor pedals – Place feet firmly on pedals.
2. YAW ENABLE/DISABLE switch – Disable.
3. If pedals still appear to be jammed, disengage FCS.
4. If pedals still appear to be jammed, perform emergency procedure for "Loss of Tail Rotor Thrust in Forward Flight" or "Loss of Tail Rotor Thrust in Hover" as applicable.

PFD FAILURE

Modes which utilize data from the PFD will be affected. ALTS and APR will be unavailable. NAV mode will be limited to GPS courses only. ALT will revert to PALT mode. If VS is engaged when PFD is restored, FCS VS will change to last stored VS bug value and begin to seek that reference.

GTN NAVIGATOR FAILURE

Navigation modes which utilize GPS or navigation radio will be unavailable. HOV, GSPD, and Low Altitude Protection will be unavailable.

SECTION 3: EMERGENCY PROCEDURES (cont'd)

GMA AUDIO PANEL FAILURE

If flying from the left pilot's seat, disengage FCS.

CAUTION

FCS aural annunciations will be provided to the right side pilot only.

LOSS OF ATTITUDE DATA

1. Cyclic and pedals – Hold firmly.
2. Maintain manual control of rotorcraft attitude.

NOTE

FCS will disconnect.

FCS PREFLIGHT TEST INCOMPLETE

Indicated by "PFT" display on GMC 605H and PFD.

The FCS system has not completed the automatic preflight test. If the preflight test does not complete as indicated by continued display of "PFT", takeoff is prohibited.

CAUTION

Failure to complete the preflight test may indicate an error with the FCS which could result in unsafe operation.

SECTION 3: EMERGENCY PROCEDURES (cont'd)

FCS PREFLIGHT TEST FAIL

Indicated by red LED illuminated next to FCS key, "PFT FAIL" displayed on GMC 605H, "PFT" displayed in red on PFD, or aural "FCS TEST FAILED" message.

The FCS system failed the automatic preflight test. The FCS, (optional) yaw axis system, and Limit Cueing will not be operational.

FCS UNPOWERED OR FAILED

If the GFC 600H system is unpowered or is failed, the system will apply forces to the cyclic control similar to a small amount of cyclic control friction. These forces are provided to reduce movement of the cyclic in the event of a failure of the FCS while the pilot's hands are not on the controls. The amount of force provided is proportional to the rate at which the cyclic is moved.

SERVO OUT OF DETENT

Out of detent servos are indicated by "P", "R", or "Y" shown in inverse video in the FCS status field on the GMC 605H and PFD. If the controls stay out of detent for more than 30 seconds then a "P DETENT", "R DETENT", or "Y DETENT" message will be displayed on the GMC 605H. A servo out of detent indication when the pilot is not moving the flight controls may indicate excessive control system friction. Verify the cyclic friction is fully loose. If the condition persists, disengage the FCS and manually fly the rotorcraft. Land as soon as practical.

NOTE

Limit Cueing will cause a servo out of detent indication when it is active.

SECTION 3: EMERGENCY PROCEDURES (cont'd)

LOSS OF HEADING DATA

Indicated by "HDG FAIL" displayed on PFD.

If heading fails, the FCS will revert to using GPS track in place of magnetic heading data. A "TRK MODE" message will be displayed as a message on the GMC 605H. The ground track reference will be displayed in a cyan box on the PFD and can be adjusted using the HDG knob. GPS NAV and APR modes will still be available. VOR, VAPP and LOC/GS modes will not be available. Yaw control system performance in hovering flight will be reduced resulting in the rotorcraft not returning to the reference heading after being displaced.

AHRS DEGRADED

Indicated by "AHRS DGRD" displayed on GMC 605H.

The GMC 605H ARHS is not receiving one or more data parameters (GPS, Air Data, or Magnetometer). The FCS will function normally, but an FCS disconnect is more likely to occur due to loss of AHRS data. Pilot's hand should be kept on the cyclic and feet on pedals while this message is displayed.

LOSS OF ACTIVE NAVIGATION DATA

Indicated by "GPS, "VOR", "LOC/GS", "GPS/GP" or "VAPP" flashes for 10 seconds on GMC 605H accompanied by a flashing amber FCS LED and automatic mode change aural annunciation.

If a navigation signal is lost while the FCS is tracking it, the FCS will hold the last roll reference and default to Lateral Attitude Hold mode (ATT). For loss of GS or GP, the vertical mode will revert to Pitch Attitude Hold mode (ATT) and hold the pitch attitude present when the mode reverted. Reengagement of Navigation mode may be attempted if desired.

SECTION 3: EMERGENCY PROCEDURES (cont'd)

LOW ALTITUDE

Indicated by "LOW ALT" displayed on GMC 605H and PFD, and aural "LOW ALTITUDE" annunciation.

1. Verify rotorcraft flight path relative to terrain.
2. Climb and maintain safe altitude. Assume manual control if necessary.

CAUTION

Do not intentionally use Low Altitude Protection to arrest a descent or maintain clearance from terrain.

NOTE

FCS will automatically change vertical mode to VS and remain in VS until the pilot initiates a mode change. The upper vertical mode may not be changed until the rotorcraft climbs above 300 feet GPS height above terrain. All upper modes may be disengaged or the FCS may be disengaged entirely at any altitude.

SECTION 4: NORMAL PROCEDURES

The following normal procedures incorporate changes to existing procedures in the R66 Pilot's Operating Handbook. The name of each procedure corresponds to the procedure in the basic Pilot's Operating Handbook.

GENERAL

NOTE

Cyclic friction must be fully off for FCS to work properly. Cyclic friction will degrade FCS performance.

NOTE

When engaged, the FCS provides force feedback on the cyclic and pedals (if optional yaw control system is engaged).

BEFORE STARTING ENGINE

After "Fuel valve" add:

NOTE

With left cyclic removed and the cyclic balance spring not wound, the right cyclic may contact the pilot's leg when pilot's hand is off the cyclic. Performance of the FCS may be degraded. To prevent contact between the pilot's leg and the cyclic, wind up balance spring per procedure in Section 7 REMOVABLE FLIGHT CONTROLS in the main POH when left cyclic is removed.

SECTION 4: NORMAL PROCEDURES (cont'd)

STARTING ENGINE AND RUN-UP

After "Avionics switch, headsets" add:

FCS . . . . . Press NAV key or cyclic FTR

FCS LED Lights . . . . . Verify amber then red

PFT . . . . . Verify passed

After "Hydraulic system" add:

FCS Check . . . . . Perform

DOORS-OFF OPERATION

Add:

FCS use is allowed with any combination of small bubble or standard doors installed or removed.

SECTION 4: NORMAL PROCEDURES (cont'd)

The following normal procedures are new procedures not in the basic R66 Pilot's Operating Handbook.

PREFLIGHT TEST (PFT)

After power is applied to the GFC 600H system a splash screen will be displayed on the GMC 605H Mode Controller. During the PFT the servos will move the controls a small amount for approximately 1 second. Press the NAV key (display shows CONT with an arrow pointing to the correct key) or the cyclic FTR button to complete the PFT. LED lights on the GMC 605H Mode Controller will cycle through a test sequence, amber lights will illuminate for one second, followed by red lights for one second, then extinguish. Aural "FCS TEST OK" or "FCS TEST FAILED" annunciates when the preflight test is completed. If the GFC 600H passes the preflight test, the display on the GMC 605H will be blank and all LED fault lights will extinguish.

If the GFC 600H fails the PFT, "PFT FAIL" is displayed in the GMC message window, "PFT" is displayed in red on the PFD, and the FCS LED illuminates red. Do not take off if "PFT" is indicated on the GMC 605H.

CAUTION

Failure to complete the preflight test may indicate an error with the FCS which could result in unsafe operation.

SECTION 4: NORMAL PROCEDURES (cont'd)

FCS CHECK

Perform at each pilot's station that has controls installed. Verify pilot wears headset and cyclic friction is off.

1. Engage FCS and engage YAW (if installed).
2. Make small cyclic and pedal control inputs 2 or 3 times in each axis and verify no abnormal forces are present.
3. Disengage the system.
4. Verify disconnect tone is heard.
5. Make small cyclic and pedal control inputs 2 or 3 times in each axis.
6. Verify FCS detent forces are removed.

ENGAGE FCS

The FCS may be engaged using any one of the following methods:

FTR button . . . . . Press and hold

GMC 605H FCS key . . . Press

LVL button . . . . . Press

Observe GMC and PFD for normal indications and ensure FCS is holding desired reference attitude before releasing flight controls.

ENGAGE FCS UPPER LEVEL MODES

Upper level FCS modes (HDG, NAV, APR, ALT, VS, IAS) may be activated by pressing the associated key on the GMC 605H Mode Controller when the FCS is engaged and indicated airspeed is greater than 45 knots. Observe GMC and PFD for normal indications and ensure FCS is holding desired reference attitude before releasing flight controls.

SECTION 4: NORMAL PROCEDURES (cont'd)

DISENGAGE FCS UPPER LEVEL MODES

To disengage all upper level modes simultaneously:

Cyclic FCS OFF button. . . Press and release

To disengage modes individually:

GMC 605H Mode key
(for active mode). . . . . Press and release

DISENGAGE FCS

The FCS may be disengaged using any one of the following methods:

If no upper level modes are engaged,

Cyclic FCS OFF button . . . Press and release twice or hold for at least one second

If upper level modes are engaged,

Cyclic FCS OFF button . . . Press and release twice or hold for at least one second

GMC 605H FCS key . . . . . Press

ENGAGE/DISENGAGE FCS YAW

While YAW ENABLE/DISABLE switch is ENABLED, the yaw control system will engage/disengage with pitch and roll when the FCS is engaged/disengaged.

MAX SPEED

Max Speed Protection may be exited by lowering the collective, resetting the pitch reference, or changing the mode such that the current pitch reference will result in an airspeed below the stabilized airspeed for Max Speed Protection.

LOW SPEED

Low Speed Protection may be exited by raising the collective, resetting the pitch reference such that an indicated airspeed of 45 knots can be maintained, or disengaging FCS upper modes.

SECTION 5: PERFORMANCE No change.

SECTION 6: WEIGHT AND BALANCE

No change.

SECTION 7: SYSTEM DESCRIPTION

SYSTEM COMPONENTS

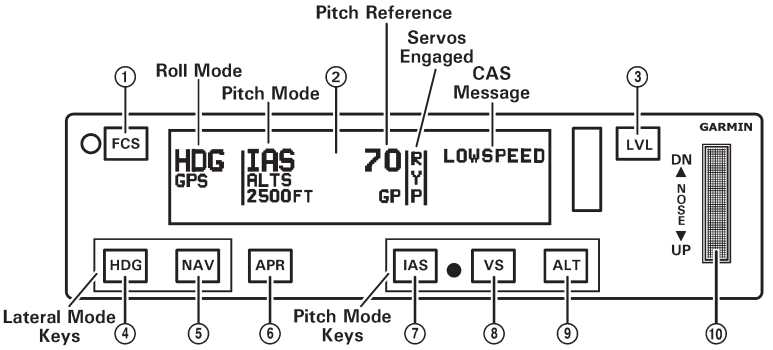
The GFC 600H system consists of a GMC 605H Mode Controller, GFS 83 electromechanical servos for the pitch, roll, and (optional) yaw axes, a GSU 75 ADAHRS, and cyclic and (optional) yaw controls. Power to the FCS is provided through the AUTOPILOT FCS circuit breaker and avionics master switch.

GMC 605H MODE CONTROLLER

The GMC 605H Mode Controller, located in the center console, is one means for the pilot to interface with the GFC 600H system. The GMC 605H display shows active modes, references, and system messages. Bezel keys provide a means to engage/disengage the FCS system and individual modes.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

GMC 605H MODE CONTROLLER (cont'd)



1. FCS — Engages/disengages the Flight Control System.
2. LCD Display — Displays FCS modes, references, and annunciations.
3. LVL — Key engages the FCS in Level mode (or selects Level mode if FCS is already engaged).
4. HDG — Key selects/deselects Heading Select mode.
5. NAV — Key selects/deselects Navigation mode. Cancels GS mode if LOC mode is either active or armed. Cancels GP mode if GPS mode is either active or armed.
6. APR — Key selects/deselects Approach mode.
7. IAS — Key selects/deselects Indicated Airspeed mode.
8. VS — Key selects/deselects Vertical Speed mode.
9. ALT — Key selects/deselects Altitude Hold mode.
10. NOSE UP/DN — Adjusts the vertical mode reference in Vertical Speed, Indicated Airspeed, and Altitude Hold modes.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

GFS 83 SERVO

The GFS 83 is an electromechanical "smart" servo which actuates the flight controls and also performs many FCS processing functions. The GFS 83 servo is installed in parallel with the primary flight controls, resulting in cyclic and tail rotor pedal movements directly proportional to movement of the servo. The servos are installed in the pitch, roll and (optional) yaw axes. The GFS 83 provides fly through capabilities, meaning that the pilot can override the system at any time by pushing through any control forces which may be present. Upon releasing the controls, the system will return to its commanded references.

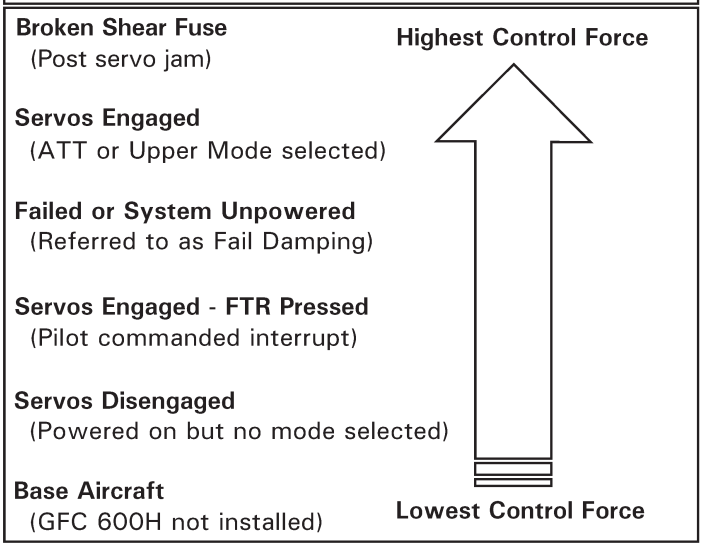
GFS 83 direct drive servos are installed in the pitch and roll axes. These servos provide a fail passive damping feature which reduces attitude deviation in the event of a servo disconnect while the pilot's hand are not on the controls. In the event of a mechanical jam in a servo, the pilot must apply sufficient force to the affected rotorcraft flight control to break the shear fuse at the output shaft of the servo, removing the servo from the control system and allowing free movement of the flight control. Some residual friction will be felt in the control axis after breaking the shear fuse.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

GFS 83 SERVO (cont'd)

The figure below illustrates the forces the GFS 83 servos provide to the helicopter's cyclic control system. In all cases, the pilot can overpower the system sufficiently to control the helicopter.

GFC 600H Cyclic Control Forces



Optionally, a GFS 83 mechanically clutched servo is installed in the tail rotor control system. This servo contains a mechanical clutch to engage the motor drive to the servo output.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

ATTITUDE AND AIR DATA SENSORS

The GFC 600H system consists of a minimum of two attitude sources and one air data source. A Garmin GSU 75H ADAHRS provides the primary attitude data and air data. The GMC 605H Mode Controller provides the second AHRS which is used as a monitor for the system.

GPS

A Garmin GPS position source provides GPS navigation data for upper modes and aiding to AHRS. GPS data is required for Ground Speed Hold (GSPD), Hover Position Hold (HOV), and Low Altitude Protection mode.

COLLECTIVE POSITION SENSOR

A position sensor provides collective position to the GFC 600H to improve system performance and aid in determining if the helicopter is on the ground.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

CYCLIC AND PANEL MOUNTED CONTROLS

Control	Common Name	Location	Color
FTR	Force Trim Release	Cyclic	White

Purpose:

Servos Disengaged:

Press and hold will engage FCS in all axes.

Any Engaged Mode:

Press and hold will reduce the control forces for the duration of time that the switch is depressed. After 1 second the system will annunciate "FTR" as indication that an extended press is active.

HOV or GSPD Mode:

Press and hold reduces control forces. Upon release system synchronizes forward and lateral ground speed references and (if enabled) yaw heading reference to current values.

ATT Mode:

Press and hold reduces control forces. Upon release system synchronizes the pitch and roll attitude reference to current values.

CPLD Upper Modes:

Upon release system synchronizes the pitch and roll reference (VS, ALT/ PALT, IAS, HDG) to the current value as applicable.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

CYCLIC AND PANEL MOUNTED CONTROLS (cont'd)

Control	Common Name	Location	Color
FCS OFF	FCS DISC	Cyclic	RED

Purpose:

Momentary Press:

If upper level mode is engaged:

Disengages all upper modes. Servos remain engaged in ATT mode.

If in ATT mode:

Momentary press disengages the pitch, roll, and (optional) yaw servos.

Double momentary press OR press and hold for 1 second:

Disengages the pitch, roll, and (optional) yaw servos.

Press and hold for 5 seconds:

Toggles Limit Cueing ON/OFF.

Control	Common Name	Location	Color
TRIM ADJUST	TRIM ADJUST	Cyclic	Black

Purpose:

Single Press:

Increments the FCS references.

Press and Hold:

Slews the FCS references.

HOV or GSPD Mode:

Increments the forward or lateral ground speeds.

ATT Mode:

Increments the reference pitch and roll attitude.

CPLD Upper Modes:

Changes the reference altitude, vertical speed, indicated airspeed, or heading as applicable.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

CYCLIC AND PANEL MOUNTED CONTROLS (cont'd)

Control	Common Name	Location	Color
LVL	Level Mode	Cyclic	Blue

Purpose:

Momentary Press:

Engages the pitch, roll, and, if enabled, optional yaw axis system in LVL mode.

Control	Common Name	Location	Color
YAW ENABLE/ DISABLE	Yaw ON/OFF	Panel adjacent pilot's side collective	White (two-position switch)

Purpose:

Enables and disables the yaw axis system. When enabled, yaw axis system will be engaged and disengaged with FCS. Enabling or disabling yaw with the FCS already engaged allows independent engagement/disengagement of yaw.

Control	Common Name	Location	Color
YAW TRIM	Yaw Trim	Panel adjacent pilot's side collective	Black (rocker switch)

Purpose:

In forward flight:

If yaw is enabled, adjusts the lateral trim reference of the yaw control system.

In low speed flight, HOV, or GSPD:

No function.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

ENGAGEMENT LIMITS

The FCS may be engaged within the range of 30° pitch up or down and 70° roll left or right. If the pitch or roll engagement limits are exceeded while the FCS is engaged, the FCS will disconnect. The FCS command limits are 10° pitch up to 10° pitch down and 30° roll left and right. Engaging the FCS or attempting to trim the FCS outside of its command limits, but within its engagement limits, will cause the FCS to return the helicopter to the nearest command limit.

MODES OF OPERATION

The default FCS mode is Attitude Hold mode (ATT) which holds the attitude reference at the time of engagement or as modified by the pilot. If in a hover or hover taxi, HOV or GSPD mode will automatically engage. GSPD allows the forward and horizontal reference to be set to a GPS ground speed. In HOV, the ground speed reference is set to zero to help aid in holding a steady hover.

If the (optional) yaw control system is installed and enabled, the yaw system will engage with FCS pitch and roll. In hover or hover taxi, the yaw system seeks to hold a reference heading. A green bug on the PFD HSI indicates the current yaw heading reference. The yaw control system holds lateral trim in forward flight.

Engagement of the FCS is indicated by a green LED next to the FCS key and the characters "P" and "R" being displayed on the GMC 605H and PFD. "Y" is shown when the (optional) yaw control system is engaged.

Upper level modes may be coupled at airspeeds above 45 knots. The tables below describe the available vertical and lateral modes that may be engaged in the FCS.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

MODES OF OPERATION (cont'd)

Vertical Mode	Control	Annunciation	Reference Range	Reference Change Increment
Altitude Hold	ALT key	ALT *xxxxx*		10 ft
		PALT *xxxxx*		
Glidepath	APR key	GP		
Glideslope		GS		
Ground Speed Hold	(See description above)	GSPD	0 to 15 kts forward or aft.	1 kt
Hover Hold	(See description above)	HOV		
IAS Hold	IAS key	IAS *xxx*	45 to 120 kts or 5 kts below V_{NE}.	1 kt
Level (LVL)	LVL key or Cyclic LVL button	LVL	Within ±30° pitch engagement limit.	
Low Altitude		LOW ALT	Engages at 200 feet GPS height above terrain if in VS, ALT/PALT, or IAS.	

SECTION 7: SYSTEM DESCRIPTION (cont'd)

MODES OF OPERATION (cont'd)

Vertical Mode	Control	Annunciation	Reference Range	Reference Change Increment
Low Speed		LOW SPD	Engages at 45 knots if in VS, ALT/PALT, or GP/GS. Does not engage in IAS mode.	
Max Speed		MAX SPD	In ATT mode: Engages when airspeed reaches 125 knots or 5 knots below V_{NE} [1]. In VS, ALT/PALT, or GP/GS mode: Engages when airspeed reaches 123 knots or 3 knots below V_{NE} [1].	
Pitch Attitude Hold (ATT)	(default)	ATT	10° nose up to 10° nose down.	0.5°
Pitch Limit Cue			High pitch limit cue engages above 15° nose up and/or 1.9 G. Low pitch limit cue engages below 16° nose down and/or 0.4 G.	

SECTION 7: SYSTEM DESCRIPTION (cont'd)

MODES OF OPERATION (cont'd)

Vertical Mode	Control	Annunciation	Reference Range	Reference Change Increment
Selected Altitude Capture	[2]	ALTS	[2]	[2]
V_{NE} Limit Cue			Engages at 125 kts or 3 knots below V_{NE} [1].	
Vertical Speed	VS key	VS *xxxx*	+1000 to −1500 fpm	100 fpm

[1] V_{NE} calculated based on current ambient conditions.

[2] ALTS arms automatically when VS or IAS is active and a valid value is set in the PFD altitude bug.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

MODES OF OPERATION (cont'd)

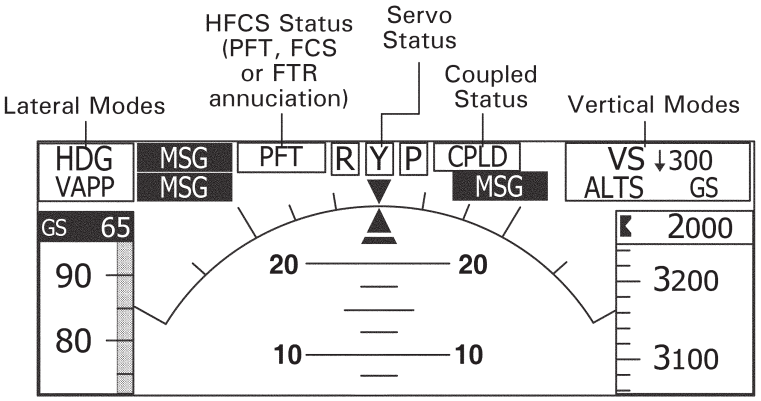
Lateral Mode	Control	Annunciation	Maximum Roll Command Limit
Roll Attitude Hold (ATT)	(default)	ATT	30° roll left and right.
Hover Hold	(See description above)	HOV	
Ground Speed Hold	(See description above)	GSPD	0 to 15 kts left or right.
Heading Select	HDG key	HDG	The lesser of 25° or standard rate. [1]
Level (LVL)	LVL key or Cyclic LVL button	LVL	70° roll engagement limit.
GPS Navigation	NAV key	GPS	30° [1]
VOR Navigation		VOR	25° [1]
LOC Navigation		LOC	25° [1]
GPS Approach	APR key	GPS	25° [1]
VOR Approach		VAPP	25° [1]
ILS/LOC Approach		LOC	25° [1]
Roll Limit Cue			Engages at 31° roll left or right.

[1] Roll command limited to 15° in upper level modes above 10,000 feet.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

FCS STATUS ANNUNCIATIONS ON GARMIN PFD

The GFC 600H interfaces with the Garmin PFD. FCS mode annunciations will be provided along the top of the PFD. The current FCS reference for VS, IAS, ALTS, and HDG will be shown on the PFD and may be controlled via the PFD in addition to the GMC 605H Mode Controller and cyclic mounted switches.



Alert Message (displayed on the PFD)	Alerting Criteria
MAXSPD	Max Speed Protection is active.
LOWSPD	Low Speed Protection is active.
FCS (red)	FCS is failed – The FCS is inoperative.
YAW FAIL	System is unable to provide yaw axis control.
PFT (white)	PFT is in progress.
PFT FAIL (red)	PFT has failed.
LOWALT	Low Altitude Protection is active.
FTR (white)	FTR button is being held.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

GMC 605H MESSAGES

Message	Description
< > KEY	The specified key on the GMC 605H is stuck in the active state.
ADC DATA	Air Data inputs to the GMC 605H have failed. Functions dependent on air data (IAS, VS, and ALT/ PALT modes; Max Speed and Low Speed Protection; overspeed aural annunciation) will not function and FCS performance may be degraded. Yaw axis system will not function.
AHRS DGRD	AHRS is not receiving aiding data from one or more parameters.
FCS SWTCH	FCS OFF switch has been active for more than 30 seconds.
COLL FAIL or COLL POS	Collective position sensor has failed. Yaw axis system performance during collective changes will be degraded. ALT/PALT, VS, IAS, GS, and GP performance during collective changes will be degraded.
CYC FTR	FTR switch has been active for more than 60 seconds.
DSABLD KEY	Key is disabled because associated function is not supported in the installation.
FCS FAIL	FCS has failed.
FTR	Force Trim Release is being held.
GPS DATA	GPS aiding is unavailable. HOV, GSPD, LOW ALT will be unavailable.
HDG FAIL	System does not have valid heading. Functions that use heading data will be degraded or unavailable.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

GMC 605H MESSAGES

Message	Description
LMTQ FAIL	The Limit Cueing function has failed. The pilot should not expect tactile feedback for pitch/roll attitude, G loading, and V_{NE} exceedances. Max Speed and Low Speed Protection remain operational.
LMTQ OFF	Limit Cueing is off. The pilot should not expect tactile feedback for pitch/roll attitude, G loading, and V_{NE} exceedances. Max Speed and Low Speed Protection remain operational.
LOWSPEED	Low Speed Protection is active.
LOW ALT	Low Altitude Protection is active.
LVL SWTCH	Cyclic LVL button has been active for more than 30 seconds.
MANIFEST	Incorrect manifest versions. Maintenance is required.
MAXSPEED	Max Speed Protection is active.
ON GROUND	System senses helicopter is on the ground and will not provide any control inputs.
P DETENT	Cyclic has been out of detent in pitch axis for more than 30 seconds.
PFT	Preflight test is in progress.
PFT FAIL	Preflight test has failed. The FCS is inoperative. Red FCS LED illuminates steady.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

GMC 605H MESSAGES (cont'd)

Message	Description
R DETENT	Cyclic has been out of detent in roll axis for more than 30 seconds.
ROLL BEEP	TRIM ADJUST in roll has been active for more than 30 seconds.
PIT BEEP	TRIM ADJUST in pitch has been active for more than 30 seconds.
TRK MODE	Heading data is unavailable, FCS has reverted from heading to GPS track mode.
Y DETENT	Tail rotor pedals have been out of detent in yaw axis for more than 30 seconds.
YAW BEEP	Yaw TRIM switch has been active for more than 30 seconds.
YAW FAIL	System is unable to provide yaw axis control.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

FCS VISUAL ANNUNCIATIONS

Normal Mode Annunciations			
FCS Status	**FCS LED**	**GMC 605H**	**GDU**
FCS Engaged	Steady Green	"R" & "P" illuminated. "ATT" displayed.	"R" & "P" displayed in green. "ATT" displayed in green.
FCS Coupled	Steady Green	"R" & "P" illuminated. Lateral and vertical modes displayed.	Lateral and vertical modes, and "R" & "P" displayed in green. "CPLD" displayed in green.
Yaw axis engaged		"Y" illuminated.	"Y" displayed in green.

Normal Disconnect Annunciations			
FCS Status	**FCS LED**	**GMC 605H**	**GDU**
FCS Disconnect	Flashing amber for 10 seconds, then extinguished.	No annunciation.	"R" & "P" & "Y" (if enabled) flashing in yellow inverse video.
Yaw axis disengaged		No annunciation.	"Y" flashing in yellow inverse video.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

FCS VISUAL ANNUNCIATIONS (cont'd)

Abnormal Disconnect			
FCS Status	**FCS LED**	**GMC 605H**	**GDU**
FCS Fail	Continuous flashing red until acknowledged, then steady red.	No annunciation.	Continuous FCS flashing red and white inverse video.

System Failure			
FCS Status	**FCS LED**	**GMC 605H**	**GDU**
FCS Fail	Continuous flashing red until acknowledged, then steady red.	FCS FAIL message displayed.	FCS displayed in red.
Yaw axis failure		YAW FAIL message displayed.	YAW message displayed in black on yellow.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

FCS AURAL ANNUNCIATIONS

FCS System Annunciation	
Aural Annunciation	**Description**
Automatic mode change: Aural "DING-DING"	Indicates a pitch or roll upper mode change. No tone played for normal transition into or out of HOV or GSPD modes.
"FCS TEST OK"	PFT has passed.
"FCS TEST FAILED"	PFT has failed.
"DECOUPLED"	All upper modes have been disengaged and pitch and roll are now in attitude hold.
FCS Engagement: Single tone aural "DING"	Played whenever FCS is engaged.
FCS Disconnect: Two-tone aural "BEE-BOOP"	Played whenever the FCS is disconnected automatically or by pilot action.
"LEVELING"	Level mode has been engaged.
"LIMIT CUE DISABLED"	Limit Cueing has been disabled.
"LIMIT CUE ENABLED"	Limit Cueing has been enabled.
"LOW ALTITUDE"	Low Altitude Protection is active.
"MAX SPEED"	Max Speed Protection is active.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

FCS AURAL ANNUNCIATIONS (cont'd)

Aural Annunciation	Description
"OVERSPEED"	V_{NE} has been exceeded.
"YAW FAIL"	Yaw axis system has failed and disconnected.
"LOW SPEED"	Low Speed Protection is active.

LEVEL MODE DESCRIPTION

Level mode provides a method to establish a safe flight attitude with a single button press. Level mode reference depends on the current default mode of the FCS at the time the LVL button is pressed. In hover or hover taxi, the following Level mode references will be set:

Lateral ground speed reference will be set to zero.

The forward speed will be set to the forward speed of the helicopter when Level mode was activated. The helicopter will remain in low speed or hover flight.

If (optional) yaw control system is enabled and a heading reference was set when Level mode was activated, the system will continue to seek that heading reference. If no heading reference was set when Level mode was activated, the heading present upon activation will become the heading reference. If yaw control system is disabled, yaw will not engage when Level mode is selected.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

LEVEL MODE DESCRIPTION (cont'd)

In forward flight, the following Level mode references will be set:

Roll angle reference will be set to zero.

The pitch angle reference will be set to 2 degrees nose down. This attitude will generally keep the helicopter in forward flight.

If (optional) yaw control system is enabled, yaw system will engage and seek lateral trim. If yaw system is disabled, yaw system will not engage when Level mode is selected.

CAUTION

Airspeed may decay when Level mode is engaged. Ensure sufficient power is applied when Level mode is activated to maintain altitude.

MAX SPEED PROTECTION

Max Speed Protection prevents the FCS from trimming to references that result in a stabilized airspeed above 120 knots or a small offset below V_{NE}, whichever is less. In attitude hold mode, Max Speed Protection becomes active at 125 knots or 3 knots below V_{NE}. A gentle pitch up force will be applied to the cyclic to seek a stabilized airspeed of 120 knots or 3 knots below V_{NE}. Visual annunciation "MAXSPD" will be provided on the GMC 605H and the PFD. Max Speed Protection will remain active until the current reference attitude would result in an airspeed of less than 120 knots or 3 knots below V_{NE}. With any vertical upper level mode engaged, Max Speed Protection will become active at 123 knots or 3 knots below V_{NE}. IAS will become the active mode with a reference of 120 knots or 6 knots below V_{NE}. Visual annunciation "MAXSPD" will be provided on the GMC 605H and the PFD, and aural annunciation "MAX SPEED" will be provided. Max Speed Protection will remain active until airspeed drops below 118 knots or 8 knots below V_{NE}.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

LOW SPEED PROTECTION

Low Speed Protection prevents inadvertent deceleration below 45 knots while VS, ALT/PALT, or GS/GP is the active vertical mode. When a coupled FCS vertical mode is selected and the airspeed or airspeed trend drops below 45 knots, IAS will become the active vertical mode with a reference of 45 knots. Visual annunciation "LOWSPD" will be provided on the GMC 605H and the PFD, and aural annunciation "LOW SPEED" will be provided. Low Speed Protection will remain active until airspeed increases above 45 knots. If airspeed continues to decay below 35 knots, the FCS will transition to attitude hold mode and an automatic mode change tone will be provided.

LOW ALTITUDE PROTECTION

Low Altitude Protection prevents inadvertent descent below 200 feet GPS height above terrain (HAT) while VS, IAS, or ALT/PALT is the active vertical mode. When conditions for Low Altitude Protection are met, VS becomes the active vertical mode with a reference of 0 fpm or the current vertical speed if a positive vertical speed was present at activation. Visual annunciation "LOW ALT" will be provided on the GMC 605H and the PFD, and aural annunciation "LOW ALTITUDE" will be provided. Low Altitude Protection will remain active until the helicopter climbs above 300 feet GPS HAT. Once Low Altitude Protection is active, the vertical mode will remain VS with the current reference until the mode or reference is changed by the pilot. If the conditions for Max Speed Protection or Low Speed Protection are met concurrently with Low Altitude Protection, the speed protection mode will take priority, however visual annunciations and aural annunciations for both protection modes will be provided.

SECTION 7: SYSTEM DESCRIPTION (cont'd)

LIMIT CUEING

Limit Cueing provides resistance to cyclic inputs when pitch, roll, airspeed, or G limits associated with safe flight are exceeded. The amount of resistance provided is proportional to the deviation beyond threshold values. If the FCS is disengaged when the threshold(s) is exceeded, the servo(s) in the affected axis (axes) will automatically engage and provide resistance until the parameter(s) exceeded is below its threshold. The affected servo will give an out of detent indication when Limit Cueing is active. Limit Cueing may be disabled/re-enabled by pressing and holding the cyclic FCS OFF button for more than 5 seconds. Limit Cueing defaults on at each power cycle of the GMC 605H.

LIGHTING

GMC 605H Mode Controller lighting is controlled by integrated photocells which sense the ambient cockpit light level.

SECTION 8: HANDLING AND MAINTENANCE

No change.