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COMNAVAIRPACINST 5420.2B/
COMNAVAIRLANTINST 5420.5C/
COMNAVAIRESFORINST 5420.2
NAVAIRPAC N45/N01M
NAVAIRLANT N45/N02M
NAVAIRESFOR N45/N3M

COMNAVAIRPAC INSTRUCTION 5420.2B/COMNAVAIRLANT INSTRUCTION
5420.5C/COMNAVAIRESFOR INSTRUCTION 5420.2

Subj: HUMAN FACTORS COUNCIL AND HUMAN FACTORS BOARD POLICY AND
PROCEDURES

Encl: (1) Human Factors Assessment Guidelines
(2) Human Factors Council Worksheet
(3) Human Factors Board Meeting Worksheet
(4) Sample Human Factors Board Assignment Letter
(5) Human Factors Review and Interventions

1. Purpose. To establish policy and procedures for standardizing the conduct of Human Factors Councils (HFCs) and Human Factors Boards (HFBS) within Navy aviation units. This instruction provides a formal mechanism for human factors inputs to the unit Commanding Officer, who can then use this information for risk assessment and subsequent decisions regarding safety of flight issues. All aircrew who routinely fly in squadron aircraft are to be included under this instruction. This is a complete revision and should be reviewed in its entirety.

2. Cancellation. COMNAVAIRLANTINST 5420.5B./COMNAVAIRPACINST 5420.2A

3. Policy. It is the policy of Commanders, Naval Air Forces Pacific, Atlantic, and Naval Air Reserves to standardize the conduct of HFCs and HFBS in order to maximize their effectiveness throughout Naval Aviation.

4. Background. Human factors continue to be the leading causal factor of aircraft mishaps. All too frequently, at least some portion of the mishap crew's human factors issues were known by various supervisors and peers, but only as isolated pieces of the whole picture. Unfortunately, the pieces are typically

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not assembled until after a mishap. Specifically, there are two basic human traits that often contribute to a mishap:

a. Personnel fail to demonstrate the knowledge, skill, or discipline necessary for the tasks assigned. This may result in the development of hazardous conditions, or the performance of unsafe acts.

b. Personnel are often under serious stress from personal or professional factors problems that are not apparent to the unit's decision makers. This stress may lead to fatigue, distraction and degraded performance, including instances of poor judgment, excessive risk-taking or poor aircrew communication and coordination.

5. Definition. For purposes of this instruction, "human factors" is that set of personal and professional circumstances which may interfere with an individual's ability to aviate effectively. These factors may include: low proficiency or stressors related to a medical condition, psychological or social adjustment, or professional problems. Examples of job-related stressors include: poor FITREP or evaluation, failure to promote, behind in qualification progress, assignment to a new position, and other career situations or uncertainties. Examples of unusual life stress include: death or severe illness of a family member or friend, divorce or failed personal or family relationship, newborn child and financial difficulties.

6. Discussion. This directive prescribes the process for identifying and correcting human factors deficiencies and inadequate skill development. HFC/HFBs are intended as tools for commanders which will better enable them to make informed decisions concerning the influence of human factors relative to the mission and safety performance of aircrews. It is recommended that aviator assessments made during the course of HFC/HFBs be accomplished within the framework of a risk management process, which follows the principles of Operational Risk Management. Prudent and timely use of these tools should not only prevent potential mishaps, but may help to prevent an aviator from failing in other areas as well.

7. Action.

a. Human Factors Council (HFC). All reporting aircraft custodians shall convene, at a minimum, quarterly HFCs. The HFC shall normally be chaired by the Commanding Officer, utilizing enclosures (1), *Human Factors Assessment Guidelines*, (2), *Human Factors Council Worksheet*, and (5), *Human Factors Review and Interventions*, as guidelines. Recommended composition includes the squadron Commanding Officer, flight surgeon, operations or training officer, aviation safety officer, a junior officer, and an enlisted aircrewman (if appropriate). Consideration may be given to include the Leading Chief/MCPOC at the Commanding Officer's discretion. The council shall review the personal and professional characteristics of all aircrew who regularly fly in squadron aircraft (for example, the Carrier Air Wing Staff members). No unrelated business shall be discussed at this meeting.

b. Human Factors Board (HFB). Using enclosure (4), Commanding Officers shall convene a HFB whenever the ability of an aircrew to safely perform his/her flight duties is in question. HFBs are focused reviews of all known factors potentially affecting the ability of an individual to perform aircrew responsibilities in a safe and efficient manner. The HFB shall provide an individual plan of action tailored to mitigate identified problems and successfully reintegrate the aircrewman back to full performance of assigned duties. Normal board composition includes the Executive Officer (chairman), an Aviation Safety Officer School graduate, Command Flight Surgeon and another experienced officer. In the event an enlisted crew member is the subject of the HFB, a senior enlisted crew member shall be a member. Members from outside the command may be used, if deemed appropriate. Examples of situations for which a HFB is appropriate include:

(1) A one-time or sustained deficiency in performance, not serious enough to warrant a FNAEB/FNFOEB.

(2) Failure to achieve expected milestones established by the command towards achievement of a required qualification or skill (i.e., aircraft commander, plane commander, section leader, etc.).

(3) A preponderance of life stressors (death of close family member or friend, divorce, severe financial problems, etc.) or unknown personal stress that may be affect flying performance.

(4) Aeromedical problems (i.e., vulnerability to vertigo, poor physical fitness or obesity, recurring airsickness, etc.).

8. Responsibilities.

a. Commanding Officer

(1) Convene HFCs quarterly and HFBS when deemed appropriate and per this instruction. Use enclosures (1) through (5) as appropriate.

(2) Retain completed enclosures (2) and (3) until the subject aircrew or the Commanding Officer transfers or they are deemed no longer useful. This information shall be treated as For Official Use Only (FOUO) and carefully protected against inappropriate disclosure.

b. Human Factors Council. The HFC is a non-punitive forum. Enclosures (2), *Human Factors Council Worksheet*, and (5), *Human Factors Review and Interventions*, are recommended guidelines to be used to evaluate current level of training, qualification progress, flight discipline, and job performance for all aircrew.

If the HFC and/or the Commanding Officer determines that an individual requires a HFB, a summary of performance deficiencies shall be prepared for forwarding to the HFB chairman. Any relevant observations, concerns and recommendations should be included.

c. Human Factors Board. The HFB is a non-punitive forum. The HFB objective is to focus on specific aviation deficiencies, and recommend an appropriate course of corrective action. The HFB shall:

(1) Notify the individual that an HFB will be convened and identify specific problem areas to be considered.

(2) Conduct a thorough review utilizing enclosures (3) *Human Factors Board Worksheet* and (5) *Human Factors Review and Interventions*.

(3) Document performance deficiencies and recommend to the Commanding Officer an appropriate course of action.

d. Reviewed Individuals. Individuals will not normally appear before a HFC, but may do so at the council's or the individual's request if questions or circumstances warrant. If desired, the individual may make written comments to be retained with the review form. Presence of the aircrewman under review is required for a HFB.

9. Conclusion. Detailed examination of sensitive personal or professional matters in a large group is neither intended or appropriate. When such matters arise, the Commanding Officer may defer detailed discussion to a more appropriate forum. The HFC is intended to be a preventative first step used to isolate and correct aircrew deficiencies. The HFB should provide a detailed evaluation and specific corrective actions to the Commanding Officer.

R. L. LEITZEL
CHIEF OF STAFF

R. B. ASKEY
CHIEF OF STAFF

R. L. CASEY
CHIEF OF STAFF

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HUMAN FACTORS ASSESSMENT GUIDELINES

1. PURPOSE. This enclosure outlines suggested methods for conducting assessments of aviator risk factors during the course of conducting a Human Factors Council or Human Factors Board meeting. Information presented here is intended to be flexible and adaptive to meeting the unique requirements of a particular command, the individual, or a situation. All of the suggested assessment methods and intervention options identified are subject to a specific command's individual interpretation and application of techniques as deemed appropriate by the Commanding Officer and Command leadership. The guidelines discussed herein are in no way intended to supersede, replace, or dictate how any Commander should use his/her preferred practices and best judgment in handling individuals within their unit who may pose a risk to safe and effective performance of the command's mission.

2. BACKGROUND. Studies conducted by the Naval Safety Center have shown that a majority of our aircraft mishaps are a consequence of "human error", and that the roots of human error mishaps can often be traced to a failure of an organization's established safeguards. We now have in place, through standardized procedures for flight qualifications (NATOPS/SOP), Aircrew Coordination Training (ACT), Operational Risk Management (ORM), and Command Leadership, the means to monitor and assess performance of aircrews and make appropriate decisions to reduce risk associated with their performance of flight and mission tasks. The use of Human Factors Councils and Boards is an additional intervention against a possible aircraft mishap. Proper use of HFC/HFBs will assist the command in reducing mishap risk by providing a process that focuses on identifying and managing aviators who pose an unacceptable risk to successful performance of the Command's mission or to flight safety.

a. High-risk Aviator: An aviator who poses a greater than average risk because of persistent performance deficiencies, situational stress, medical condition, one who shows a history of poor judgment, or a pattern of high-risk taking behavior.

b. High-risk Categories: It is recognized that the determination of which, if any, of a command's aviators are at risk is a highly subjective judgment. *The Human Factors Review and Interventions*, enclosure (5), was prepared to help simplify and guide the process of identifying specific areas of risk. This enclosure describes several aviator risk categories, key characteristics of aviators in each risk category, and a convenient list of possible interventions to mitigate risk. Enclosure (5) is intended for use as a background reference, during the course of conducting Human Factors Councils and Boards, to help identify and manage each of the five categories of aviator risk. The aviator risk categories, listed in enclosure (5) include: (a) Below average nugget or transition aviator, (b) Over-confident senior aviator, (c) Best pilot, (d) Consistent poor performer, and (e) Over-stressed aviator.

3. ASSESSMENT PROCESSES

a. Worksheet for Human Factors Council Meeting: Enclosure (2) is provided for use during the conduct of the Human Factors Council meeting. This worksheet includes a template for assessment of all aircrews on key areas of performance, as well as a list of critical indicators related to safety

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risk. During the conduct of an HFC, the council members should review the performance of all aviators in the unit or who are flying squadron aircraft and identify the presence of any of the critical indicators listed in enclosure (5). If performance deficiencies or critical indicators are identified, a recommended course of action shall be presented to the unit's Commanding Officer. It is expected that in most cases no formal actions may result as a consequence of the council's review, and that a broad range of options would be considered in the event of identifying performance deficiencies or critical indicators. Such decision actions may include, but are not limited to, creative scheduling, providing additional guidance and training, counseling, etc. In the event that the deficiency or indicator is severe, in the judgment of the council, a recommendation for referral to a Human Factors Board may be warranted.

b. Worksheet for Human Factors Board: Enclosure (3) is provided for use during the conduct of the Human Factors Board. This worksheet provides a template for assessing an aviator who has been referred to a board for review. The worksheet includes possible assessment areas, including items related to aviator performance, qualification progress, professional attitude, flight discipline, and/or aeromedical concerns. An optional rating scale for assessing an aviator in terms of hazard severity and mishap probability has also been incorporated.

HUMAN FACTORS COUNCIL MEETING WORKSHEET

The HFC shall review personal and professional circumstances, and direct particular attention toward uncovering underlying medical, physiological, social, behavioral and/or psychological factors which could adversely affect aircrew performance. The HFC is convened only in the interest of aviation safety and shall make no recommendations which are disciplinary in nature.

During HFC deliberations, consideration shall be given to current squadron OPTEMPO, workload, command communications and other factors which may influence aircrew performance and safety.

DATE: _____

MEMBERS PRESENT _____

1. Operations: Provide flight data or documentation as needed.

a. OPTEMPO. Is the squadron flying too much or too little?

b. Individual flight time summaries. Are aviators flying enough to maintain proficiency?

2. Training: Provide data to assess the following:

a. Aircrew qualifications and professional progress.

b. NATOPS/instrument/physiology/survival swims qualifications/upgrades. Is anyone about to lose qualifications?

3. All members should discuss the following as related to each individual:

a. Naval Aviation Skills and Qualifications Progress:

b. Systems and Procedures Knowledge:

c. Aircrew Coordination Performance:

d. Professional Discipline: Maturity and Work Habits

e. Risk-taking Behavior:

f. Career Development and Other Job Performance Factors:

4. Critical Indicators:

a. Declining performance: Failure to meet required standards or qualifications progress:

b. Known violations or instances of poor flight discipline:

c. Presence of major life or job stressors:

d. Classified as High-risk aviator as outlined in enclosure (5):

5. Recommended action. (The HFC shall make no recommendations which are disciplinary in nature.)

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HUMAN FACTORS BOARD WORKSHEET

INDIVIDUAL _____ DATE REVIEWED _____

SPECIFIC REASON FOR HFB _____

1. AVIATOR PERFORMANCE AND QUALIFICATIONS PROGRESS:

Factors Considered in Assessment:

- General Aviation Skills
- Systems Knowledge and Procedures
- Aircrew Coordination Performance
- Professional Discipline
(Adherence to standards, maturity, and work habits)
- Career Development and Other Job Performance Factors

HAZARD Assessment: 1 2 3 4 5
 Negligible Minor Moderate Serious Critical

MISHAP Probability: 1 2 3 4
 Unlikely Low Medium High

Comments: _____

2. AEROMEDICAL CONCERNS

Factors considered in assessment:

- Health and Fitness (Flight Surgeon Input)
- Job-Related Stressors
- Personal-life Stressors

HAZARD Assessment: 1 2 3 4 5
 Negligible Minor Moderate Serious Critical

MISHAP Probability: 1 2 3 4
 Unlikely Low Medium High

Comments: _____

3. Other considerations or concerns: _____

4. Summary of Findings:

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5. Recommendations to Commanding Officer:

HUMAN FACTORS BOARD ASSIGNMENT LETTER

Ser

3750

Date

From: Commanding Officer, (Squadron)
To: CDR Justin (NMN) Case, USN, 123-45-6789/1310
Subj: **HUMAN FACTORS BOARD ICO LT DUSTIN D. WIND, USNR,
987-65-4321/1315**

Ref: (a) COMNAVAIRPACINST 5420.2B/COMNAVAIRLANTINST 5420.5C/
COMNAVAIRESFORINST 5420.2

1. Per reference (a), you are hereby directed to conduct a Human Factors Board in consideration of LT Dustin D. Wind. Composition of the Board will be as follows:

CDR Justin Case, Senior Member
LCDR Henry T. Smith, (Squadron)
LT Michael N. Jones, Flight Surgeon
LT Jo Leader, (Squadron)

2. Using enclosures (1), (3) and (5) of reference (a), you will conduct a thorough investigation into any human factors which may be affecting this aircrew's performance. Specifically, the Board shall exhaust every effort to address the following concerns: (specific areas of concern should be listed here)

3. Using enclosure (3) of reference (a), the Board shall submit recommendations for corrective action, and forward a report to me no later than dd Month yy.

J. J. SKIPPER

HUMAN FACTORS REVIEW AND INTERVENTIONS

AVIATOR RISK CATEGORY	KEY CHARACTERISTICS	POSSIBLE INTERVENTIONS
A. BELOW AVERAGE NUGGET OR TRANSITION AVIATOR	<ol style="list-style-type: none"> 1. Behind peers in progression. 2. Fails NATOPS exams or check rides 3. Poor knowledge of procedures. 4. Lacks flying skills or mission proficiency. 5. Shows poor headwork or judgement. 6. Lacks confidence in ability. 7. Weak aircrew coordination skills. 	<ul style="list-style-type: none"> - Give remedial training in weak areas. - Move back in training syllabus. - Selectively schedule. - Crew with best teacher not best aviator. - Minimize collateral duties. - Counsel and document performance trends. - Provide candid, but constructive debriefs. - Recommend for Human Factors Board, or FNAEB. - Return to FRS.
B. OVERCONFIDENT SENIOR AVIATOR	<ol style="list-style-type: none"> 1. Has been out of cockpit, or is not flying enough. 2. Has "been there-done that" attitude. 3. Relies on experience instead of proficiency. 4. Does not adhere to NATOPS or standards. 5. Uses rank inappropriately to "bend" the rules. 6. Fails to recognize own limits. 7. Intimidates cockpit crew. 8. Poor aircrew coordination. 	<ul style="list-style-type: none"> - CO confront and counsel. - Closely monitor progression. - Crew with senior aviators. - Clarify adherence to standard procedures. - Provide additional flight time. - Document progress. - Refer to higher authority. - Provide aircrew coordination training review.

AVIATOR RISK CATEGORY KEY CHARACTERISTICS POSSIBLE INTERVENTIONS

AVIATOR RISK CATEGORY	KEY CHARACTERISTICS	POSSIBLE INTERVENTIONS
C. "BEST PILOT/AVIATOR/AIRCREWMAN"	<ol style="list-style-type: none">1. Typically "good stick", but over estimates ability.2. May be highly regarded by command and peers.3. Consistently pushes the aircraft envelope.4. Completes mission at "any" cost.5. Lacks judgment and accurate perception of mission risks.6. Violates NATOPS/SOP.7. Thinks rules apply only to the "average" aviator.8. Talks down to other pilots.9. Prefers high risk missions and conditions to preserve best pilot image.10. Low regard for aircrew coordination, takes minimal input from other aircrew.	<ul style="list-style-type: none">- CO confront and counsel.- Clarify and enforce standards.- Promote peer accountability.- Restrict flights, or ground for temporary period.- Suspend qualifications.- Closely supervise and monitor.- Document progress.- Refer to Human Factors Board or FNAEB.- Provide aircrew coordination review.

AVIATOR RISK CATEGORY KEY CHARACTERISTICS POSSIBLE INTERVENTIONS

<p>D. CONSISTENT POOR PERFORMER</p>	<ol style="list-style-type: none"> 1. History of below average performance. 2. May be well liked and excel at ground duties. 3. Barely meets, or shows slow qualification progress. 4. High rate of flight snivels. 5. Easily distracted and task overloaded. 6. Frequently suffers loss of situational awareness. 7. Does not seem to improve, or come up to peer level. 8. Usually behind peers in progression. 9. Lacks self-confidence. 10. Excess dependence on other aircrew members. 	<ul style="list-style-type: none"> - Provide candid critique and requirements to improve. - Close supervision and performance monitoring. - Set achievable standards and performance goals. - Provide remedial training and defined time to improve. - Crew with experienced and best instructors. - Selective scheduling. - Refer to Human Factors Board or FNAEB.
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<p>E. OVERSTRESSED AVIATOR</p>	<ol style="list-style-type: none"> 1. Presence of major stressors, such as death of close family member or friend, recent divorce, failed relationship, serious financial setback, job performance problems, etc. 2. Noticeable change in mood or personality. 3. Frequent, out of proportion, anger, resentment, hostility. 4. Distracted, mentally pre-occupied, loss of focus. 5. Uncharacteristic breakdown of flight discipline/intentional violations. 6. High rate of flight snivels. 7. Excess alcohol use. 	<ul style="list-style-type: none"> - Identify and address source of stress. - Command counseling. - Flight surgeon review. - Selective scheduling. - Close supervision and monitoring. - Temporary grounding/flight restrictions. - Reduce job workload and stress. - Send to family services or stress management clinic. - Refer to Human Factors Board.
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