
To: James Passe(tm@passeip.com)
Subject: U.S. Trademark Application Serial No. 97120294 - SENSE ASSIGN FORECAST ENGAGE - KANN001TM
Sent: August 25, 2022 10:00:31 AM EDT
Sent As: tmng.notices@uspto.gov

Attachments

[screencapture-www-artofmanliness-com-character-behavior-how-to-develop-the-situational-awareness-of-jason-bourne-16614336219751](#)
[screencapture-en-wikipedia-org-wiki-Situation Awareness-16614336846621](#)
[screencapture-www-itstactical-com-intellicom-mindset-3-effective-techniques-to-train-your-situational-awareness-and-recognize-change-16614338069841](#)
[screencapture-www-coolfiresolutions-com-blog-what-is-situational-awareness-16614339781851](#)
[screencapture-skybrary-aero-articles-situational-awareness-16614344237251](#)
[screencapture-www-ahdictionary-com-word-search-html-16614344613981](#)
[screencapture-www-collinsdictionary-com-dictionary-english-sense-16614344977611](#)
[screencapture-www-ahdictionary-com-word-search-html-16614346794991](#)
[screencapture-www-macmillandictionary-com-dictionary-american-assign-16614347427221](#)
[screencapture-www-lexico-com-en-definition-forecast-16614348066811](#)
[screencapture-www-ahdictionary-com-word-search-html-16614348303861](#)
[screencapture-www-lexico-com-en-definition-engage-16614348757991](#)
[screencapture-www-collinsdictionary-com-dictionary-english-engage-16614349128011](#)

United States Patent and Trademark Office (USPTO) Office Action (Official Letter) About Applicant's Trademark Application

U.S. Application Serial No. 97120294

Mark: SENSE ASSIGN FORECAST ENGAGE

Correspondence Address:

JAMES PASSE
PASSÉ INTELLECTUAL PROPERTY, LLC
1717 BRASSFIELD ROAD
RALEIGH NC 27614 UNITED STATES

Applicant: Anne Kelly

Reference/Docket No. KANN001TM

Correspondence Email Address: tm@passeip.com

NONFINAL OFFICE ACTION

The USPTO must receive applicant's response to this letter within six months of the issue date below or the application will be abandoned. Respond using the Trademark Electronic Application System (TEAS). A link to the appropriate TEAS response form appears at the end of this Office action.

Issue date: August 25, 2022

The referenced application has been reviewed by the assigned trademark examining attorney. Applicant must respond timely and completely to the issue(s) below. 15 U.S.C. §1062(b); 37 C.F.R. §§2.62(a), 2.65(a); TMEP §§711, 718.03.

SUMMARY OF ISSUES:

- Mark is merely descriptive refusal
- Option to overcome refusal
- Identification of goods/services
- Classification of goods/services
- Multi-class application requirements

SEARCH RESULT

The trademark examining attorney has searched the USPTO database of registered and pending marks and has found no conflicting marks that would bar registration under Trademark Act Section 2(d). 15 U.S.C. §1052(d); TMEP §704.02.

SECTION 2(e)(1) REFUSAL--MARK IS MERELY DESCRIPTIVE

Registration is refused because the applied-for mark merely describes the applicant's goods and/or services. Trademark Act Section 2(e)(1), 15 U.S.C. §1052(e)(1); *see* TMEP §§1209.01(b), 1209.03 *et seq.*

A mark is merely descriptive if it describes an ingredient, quality, characteristic, function, feature, purpose, or use of an applicant's goods and/or services. TMEP §1209.01(b); *see, e.g., In re TriVita, Inc.*, 783 F.3d 872, 874, 114 USPQ2d 1574, 1575 (Fed. Cir. 2015) (quoting *In re Oppedahl & Larson LLP*, 373 F.3d 1171, 1173, 71 USPQ2d 1370, 1371 (Fed. Cir. 2004)); *In re Steelbuilding.com*, 415 F.3d 1293, 1297, 75 USPQ2d 1420, 1421 (Fed. Cir. 2005) (citing *Estate of P.D. Beckwith, Inc. v. Comm'r of Patents*, 252 U.S. 538, 543 (1920)).

The determination of whether a mark is merely descriptive is made in relation to an applicant's goods and/or services, not in the abstract. *DuoProSS Meditech Corp. v. Inviro Med. Devices, Ltd.*, 695 F.3d 1247, 1254, 103 USPQ2d 1753, 1757 (Fed. Cir. 2012); *In re The Chamber of Commerce of the U.S.*, 675 F.3d 1297, 1300, 102 USPQ2d 1217, 1219 (Fed. Cir. 2012); TMEP §1209.01(b). “Whether consumers could guess what the product [or service] is from consideration of the mark alone is not the test.” *In re Am. Greetings Corp.*, 226 USPQ 365, 366 (TTAB 1985). Determining the descriptiveness of a mark is done in relation to an applicant's goods and/or services, the context in which the mark is

being used, and the possible significance the mark would have to the average purchaser because of the manner of its use or intended use. *See In re The Chamber of Commerce of the U.S.*, 675 F.3d 1297, 1300, 102 USPQ2d 1217, 1219 (Fed. Cir. 2012) (citing *In re Bayer Aktiengesellschaft*, 488 F.3d 960, 963-64, 82 USPQ2d 1828, 1831 (Fed. Cir. 2007)); TMEP §1209.01(b). Descriptiveness of a mark is not considered in the abstract. *In re Bayer Aktiengesellschaft*, 488 F.3d at 963-64, 82 USPQ2d at 1831.

“A mark may be merely descriptive even if it does not describe the ‘full scope and extent’ of the applicant’s goods or services.” *In re Oppedahl & Larson LLP*, 373 F.3d 1171, 1173, 71 USPQ2d 1370, 1371 (Fed. Cir. 2004) (citing *In re Dial-A-Mattress Operating Corp.*, 240 F.3d 1341, 1346, 57 USPQ2d 1807, 1812 (Fed. Cir. 2001)); TMEP §1209.01(b). It is enough if a mark describes only one significant function, attribute, or property. *In re The Chamber of Commerce of the U.S.*, 675 F.3d 1297, 1300, 102 USPQ2d 1217, 1219 (Fed. Cir. 2012); TMEP §1209.01(b); *see In re Oppedahl & Larson LLP*, 373 F.3d at 1173, 71 USPQ2d at 1371.

The mark is SENSE ASSIGN FORECAST ENGAGE for "educational services and materials, namely [sic] onsite and remote training, experiential learning, and printed educational materials to promote situational awareness for proactive safety and staff engagement in healthcare settings and distribution of educational materials." The mark is merely descriptive of the goods/services. Situational awareness is the concept of being aware of one's environment and/or situation. Steps in situational awareness are sensing the elements in the situation, assigning or comprehending the meaning of the elements, forecasting or predicting the future status of the elements, and engaging or taking action regarding the elements. Please see the attached definitions and the excerpted representative articles describing situational awareness and the various steps in achieving and managing situational awareness. The applicant's goods/services regarding situational awareness may feature and involve the steps of sensing, assigning, forecasting, and engaging. And as stated in the identification, the goods/services involve "staff engagement."

Two major reasons for not protecting descriptive marks are (1) to prevent the owner of a descriptive mark from inhibiting competition in the marketplace and (2) to avoid the possibility of costly infringement suits brought by the trademark or service mark owner. *In re Abcor Dev. Corp.*, 588 F.2d 811, 813, 200 USPQ 215, 217 (C.C.P.A. 1978); TMEP §1209. Businesses and competitors should be free to use descriptive language when describing their own goods and/or services to the public in advertising and marketing materials. *See In re Styleclick.com Inc.*, 58 USPQ2d 1523, 1527 (TTAB 2001). Others providing the same or similar goods/services would require the use of the wording(s) without fear of infringement suit.

Accordingly, the mark is not registrable on the Principal Register.

Although applicant's mark has been refused registration, applicant may respond to the refusal(s) by submitting evidence and arguments in support of registration.

OPTION TO OVERCOME REFUSAL--SUPPLEMENTAL REGISTER

Although an amendment to the Supplemental Register would normally be an appropriate response to this refusal(s), such a response is not appropriate in the present case. The instant application was filed under Trademark Act Section 1(b) and is not eligible for registration on the Supplemental Register until an acceptable amendment to allege use meeting the requirements of 37 C.F.R. §2.76 has been timely filed. 37 C.F.R. §2.47(d); TMEP §§816.02, 1102.03.

If applicant files an acceptable allegation of use and also amends to the Supplemental Register, the application effective filing date will be the date applicant met the minimum filing requirements under 37 C.F.R. §2.76(c) for an amendment to allege use. TMEP §§816.02, 1102.03; *see* 37 C.F.R. §2.75(b). In addition, the undersigned trademark examining attorney will conduct a new search of the USPTO records for conflicting marks based on the later application filing date. TMEP §§206.01, 1102.03.

Please note that applications on the Supplemental Register are not subject to opposition under 15 U.S.C. §1063; TMEP § 815. Upon approval of the mark for registration, the record will indicate that the mark has been "Allowed for Supplemental Registration" rather than that the mark has been approved for publication. Marks on the Supplemental Register are not published for opposition, but are issued as **registered marks** on the date that they are printed in the *Official Gazette*. TMEP § 815.

INFORMALITIES

If applicant responds to the refusal(s), applicant must also respond to the requirement(s) set forth below.

IDENTIFICATION OF GOODS/SERVICES

Some of the identification of goods/services are indefinite and must be clarified. *See* 37 C.F.R. §2.32(a)(6); TMEP §1402.01. Applicant must amend the identification to specify the common commercial or generic name of the goods/services. *See* TMEP §1402.01. If the goods have no common commercial or generic name, applicant must describe the product, its main purpose, and its intended uses. *See id.* If the services have no common commercial or generic name, applicant must describe or explain the nature of the services using clear and succinct language. *See id.*

"Printed educational materials" are classified in class 16.

The application encompasses goods/services that are classified in more than one class.

For easier reference, the suggested amendments are shown in bold and italics.

Applicant may adopt the following identification, if accurate:

Printed educational materials featuring situational awareness for proactive safety and staff engagement in healthcare settings, in international class 16;

Educational services and materials, namely, onsite and remote training ***and experiential learning in the nature of in-person instruction regarding*** situational awareness for proactive safety and staff engagement in healthcare settings and distribution of educational materials ***in connection therewith***, in international class 41.

Applicant's goods and/or services may be clarified or limited, but may not be expanded beyond those originally itemized in the application or as acceptably amended. *See* 37 C.F.R. §2.71(a); TMEP §1402.06. Applicant may clarify or limit the identification by inserting qualifying language or deleting items to result in a more specific identification; however, applicant may not substitute different goods and/or services or add goods and/or services not found or encompassed by those in the original application or as acceptably amended. *See* TMEP §1402.06(a)-(b). The scope of the goods and/or services sets the outer limit for any changes to the identification and is generally determined by the

ordinary meaning of the wording in the identification. TMEP §§1402.06(b), 1402.07(a)-(b). Any acceptable changes to the goods and/or services will further limit scope, and once goods and/or services are deleted, they are not permitted to be reinserted. TMEP §1402.07(e).

For assistance with identifying and classifying goods and services in trademark applications, please see the USPTO's online searchable *U.S. Acceptable Identification of Goods and Services Manual*. See TMEP §1402.04. **To expedite prosecution of this trademark application, when amending the identification as required above, the Office strongly encourages the applicant to select pre-approved wording contained within this manual that accurately describes the goods and/or services therein.** Failure to do so may result in delay.

CLASSIFICATION OF GOODS/SERVICES

If applicant adopts the suggested amendment of the identification of goods and/or services, then applicant must amend the classification to International Class(es) 16 and 41. *See* 37 C.F.R. §§2.32(a)(7), 2.85; TMEP §§805, 1401.

MULTIPLE-CLASS APPLICATION REQUIREMENTS

The application identifies goods and/or services in more than one international class; therefore, applicant must satisfy all the requirements below for each international class based on Trademark Act Section 1(b):

- (1) **List the goods and/or services by their international class number** in consecutive numerical order, starting with the lowest numbered class.
- (2) **Submit a filing fee for each international class** not covered by the fee(s) already paid (view the [USPTO's current fee schedule](#)). The application identifies goods and/or services that are classified in at least two (2) classes; however, applicant submitted a fee(s) sufficient for only one class(es). Applicant must either submit the filing fees for the classes not covered by the submitted fees or restrict the application to the number of classes covered by the fees already paid.

See 37 C.F.R. §2.86(a); TMEP §§1403.01, 1403.02(c).

For an overview of the requirements for a Section 1(b) multiple-class application and how to satisfy the requirements online using the Trademark Electronic Application System (TEAS) form, see the [Multiple-class Application webpage](#).

How to respond. [Click to file a response to this nonfinal Office action.](#)

/Alex Seong Keam/
Attorney-Advisor
U.S. Patent and Trademark Office
Law Office 114
(571) 272-9176
alex.keam@uspto.gov

RESPONSE GUIDANCE

- **Missing the response deadline to this letter will cause the application to abandon.** The response must be received by the USPTO before midnight **Eastern Time** of the last day of the response period. TEAS maintenance or unforeseen circumstances could affect an applicant's ability to timely respond.
- **Responses signed by an unauthorized party** are not accepted and can **cause the application to abandon**. If applicant does not have an attorney, the response must be signed by the individual applicant, all joint applicants, or someone with legal authority to bind a juristic applicant. If applicant has an attorney, the response must be signed by the attorney.
- If needed, **find contact information for the supervisor** of the office or unit listed in the signature block.



GET ACTION ▾

GET STYLE ▾

GET SOCIAL ▾

GET SKILLED ▾

PODCAST

BOOKS

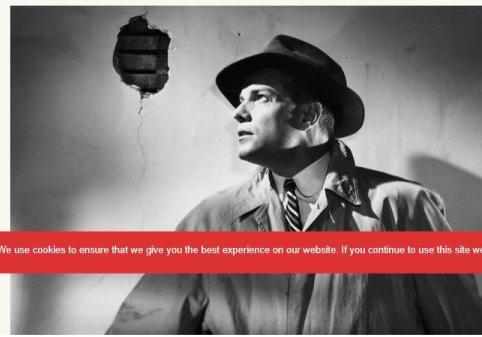
SEARCH

The first banner is yellow with blue text: "Constant Contact is a trusted partner in my marketing strategy." -Sonja Rasula, Unique Markets. The second banner is red with white text: "Thank You for Attending this Past Year". The third banner is blue with white text: "Constant Contact" and a "Learn more" button.

in: *Behavior, Character, Featured*

Brett & Kate McKay • February 5, 2015 • Last updated: August 25, 2021

How to Develop the Situational Awareness of Jason Bourne



NEVER MISS AN UPDATE
Subscribe to the AoM Newsletter

Email Address

SUBSCRIBE

HBO MAX
LIMITED-TIME OFFER
SAVE OVER 40%
WHEN YOU PREPAY

We use cookies to ensure that we give you the best experience on our website. If you continue to use this site we will assume that you are happy with it. [Ok](#) [Privacy policy](#)

Offer valid through 10/30/22. Savings based on the value of the yearly plan and a two-year pre-pay. Not all plans available. Minimum Credit Required. Details available at [hbo.com/prepay](#).

There's a scene at the beginning of *The Bourne Identity* where the film's protagonist is sitting in a diner, trying to figure out who he is and why he has a bunch of passports and a gun stashed in a safety deposit box. Bourne also notices that he, well, notices things that other people don't. Watch:



That superhuman ability to observe his surroundings and make detailed assessments about his environment? It's not just a trait of top secret operatives; it's a skill known as situational awareness, and you can possess it too.

As the names implies, situational awareness is simply knowing what's going on around you. It sounds easy in principle, but in reality requires much practice. And while it is taught to soldiers, law enforcement officers, and yes, government-trained assassins, it's an important skill for civilians to learn as well. In a dangerous situation, being aware of a threat even seconds before everyone else can keep you and your loved ones safe.

But it's also a skill that can and should be developed for reasons outside of personal defense and safety. Situational awareness is really just another word for mindfulness, and developing mine has made me more cognizant of what's going on around me and more present in my daily activities, which in turn has helped me make better decisions in all aspects of my life.

I've spent months researching and talking to experts in the tactical field about the nature of situational awareness, and below you'll find one of the most complete primers out there on how to gain this important skill. While the focus is primarily on developing your situational awareness to prevent or survive a violent attack, the principles discussed can also help hone your powers of observation in all areas of your life.

How to Develop Situational Awareness

Many of the resources out there on situational awareness could be criticized for...



Podcast #829
The Bicycle as Freedom and Flight

Podcast #828
The Groundhog Day Roadmap for Changing Your Life

Podcast #827
Where You Should Live When You Could Live Anywhere

Podcast #826
From Novice to Advanced – The Weightlifter's Journey

[VIEW ALL >>](#)



MANY OF THE RESOURCES OUT THERE ON SITUATIONAL AWARENESS SAY IT CAN BE CULTIVATED BY generally keeping tabs on your surroundings — “checking your six” and “keeping your back to the wall.”

This definition isn’t wrong. That’s exactly what situational awareness is: knowing what’s going on by scanning your environment. But I always found this explanation lacking. What exactly am I looking for? How do I know if I’m paying attention to the right things? Are there behaviors or warning signs of an imminent threat that I should know about?

Today we’re going to start by discussing the general principles of increasing your observational abilities, and then dive deeper into situational awareness itself to answer these important questions.

Observe + Orient = Situational Awareness

The thing that helped me finally understand situational awareness was framing it within the OODA Loop. For those of you who haven’t read my [in-depth article on this important cognitive tool](#), here’s the CliffsNotes version:

The OODA Loop is a learning system and decision-making process that was first laid out by Air Force fighter pilot and [military strategist John Boyd](#). The four steps of the OODA Loop are Observe, Orient, Decide, Act. In a head-to-head competition, like air-to-air combat, a violent confrontation in a parking lot, or even political contests, the person who can cycle through the OODA Loop the fastest wins.

Obviously, the Observe step in the loop is what most people associate situational awareness with.

But it’s the second step in the OODA Loop – Orient — that answered my questions about what developing situational awareness actually involves. Orientation tells us *what we* should look for when we’re observing, and then puts those observations into context so we know what to do with the information.

So Observe + Orient = Situational Awareness.

But how can we become better observers so that we can improve our situational awareness? And how should we orient ourselves so that we observe the right things and understand the context for what we’re seeing?

Observe: Stay in Condition Yellow

In his seminal book, [Principles of Personal Defense](#), gun-fighting expert Jeff Cooper laid out a color code system to help warriors gauge their mindset for combat scenarios. Each color represents a person’s potential state of awareness and focus:

**40%
WHEN YOU PREPAY
FOR A YEAR**

SIGN UP NOW

Offer valid through 10/30/22. Monthly plan on the price of the yearly plan and will be converted to the price of the monthly plan over 12 months. Discount applies to first year only. Early renewals for consecutive months, visit [here](#) for details.

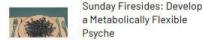
Related ARTICLES //



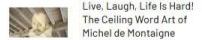
Podcast #828: The Groundhog Day Roadmap for Changing Your Life



Build a Bug Out Kindle: A Digital Survival Library at Your Fingertips



Sunday Firesides: Develop a Metabolically Flexible Psyche



Live, Laugh, Life Is Hard! The Ceiling Word Art of Michel de Montaigne

VIEW ALL >>



For optimal situational awareness, Cooper recommends that we always stay in [Condition Yellow](#)

Condition Yellow is best described as "relaxed alert." There's no specific threat situation, but you have your head up and you're taking in your surroundings with all your senses. Most people associate situational awareness with just visual stimulation, but you can also learn a lot about a particular scenario from the sounds (or lack thereof) and even smells in the environment.

Even though your senses are slightly heightened in Condition Yellow, it's also important to stay relaxed. By adopting a calm demeanor, you won't bring any unnecessary attention to yourself. If you look antsy and your head is swiveling frantically while you scan your surroundings, people are going to notice you. Additionally, staying relaxed ensures that you maintain an open focus, which allows you to take in more information about what's going on around you. Research shows that when we get nervous or stressed, our attention narrows, causing us to concentrate on just a few things at a time. A narrow focus can therefore cause us to miss important details in our environment.





Situational awareness isn't just for times when your enemy is of the human variety...

Look up from your smartphone, don't zone out, open your eyes, ears, and nose, and calmly scan your environment to take in what's going on.

Besides staying in Condition Yellow, here are a few more tips to improve your observational abilities:

Put yourself in a position for optimal observation. To achieve effective situational awareness, you need to be able to observe as much of your surroundings as possible. Positioning yourself in obstructed spots will inhibit the flow of information coming in. For example, something might be in your way that prevents you from seeing a bad guy enter a theater or restaurant. You also don't have eyeballs in the back of your head, so you can't see what's going on behind you.

So whenever you enter an environment, put yourself in a position that will allow you to see as much as you can. My buddy Mike Seeklander at [Shooting Performance](#) recommends finding a place where you can view all or most of the exit points, and that allows you to put your back to the wall. This position readies you to make a quick getaway, and eliminates the possibility of failing to see a threat materialize behind you.



Granted, this isn't possible in all situations. You don't have much control as to which table a restaurant hostess seats you at on a busy night, and you'd likely get a lot of strange looks if you stood with your back in a corner while you're waiting in line at Five Guys. So do your best within the given circumstances. In that busy restaurant, you might not have control of your table location, but you can choose which seat you take. Pick the chair that gives you the best view from your table. When you're standing in line at a fast food

restaurant, just nonchalantly look around and take in the scene.

Hone your observation skills by playing the A-Game. Mike plays a game with his kids called the "A-Game," or Awareness Game, to help them (and himself) strengthen their observational skills. To play, when you go into a business, make note of a few things about your environment: the number of workers behind the counter, the clothing and gender of the person sitting next to you, how many entry/exits there are, etc. When you leave and get into the car to head home, ask your kids questions like "How many workers were behind the counter?" "Was the person sitting next to us a man or a woman?" "What color was his/her shirt?" "How many exits were there?"

It's fun to play, but more importantly it's training your kids (and you) to be more mindful of their surroundings.

Master memorization. Another fun activity that will help improve your situational awareness is to practice memorizing things. Bourne knew all the license plate numbers of the cars outside the diner. You can gain this skill by [practicing with a deck of cards](#), or strings of numbers. [Here's a guide on how to gain the ability to memorize anything you want.](#)

Orient: Baselines, Goals, and Action Plans

Being more observant isn't enough to master situational awareness. You have to know what you're looking for, and then put that information into context so it has meaning and becomes actionable. That's where the Orient phase comes into play.

The Orient step provides three things to help us achieve situational awareness: 1) baselines and anomalies for our particular environment, 2) mental models of human behavior we should look for, and 3) plans of action depending on our observations.

Establish a Baseline Wherever You Go



Every environment and person has a baseline. A baseline is what's "normal" in a given

situation, and it will differ from person to person and environment to environment. For example, the baseline at a small coffee shop will usually entail people reading a book or working on their computer or speaking in hushed tones with their friends. The baseline at a rock concert would be loud music and people looking at the stage while either jumping up and down to the music or swaying their bodies to the beat.

We establish baselines so that we can spot anomalies. According to Patrick Van Horne, situational awareness expert, instructor of the Marine Combat Profiling system, and author of *Left of Bang*, "Anomalies are things that either do not happen and should, or that do happen and shouldn't." Anomalies are what direct our attention as we take in our surroundings and what we need to focus on to achieve situational awareness.

So the first step in orienting ourselves is to establish baselines so that we can direct our attention to anomalies. How do we do that on the fly? Van Horne suggests that you mentally ask yourself these questions every time you enter a new environment:

- **Baseline Questions:** What's going on here? What's the general mood of the place? What's the "normal" activity that I should expect here? How do most people behave here most of the time?
- **Anomaly Question:** What would cause someone or something to stand out?

Behavioral Clusters to Look For



Our inability to pay attention to everything all at once makes it impossible to obtain complete situational awareness. The human mind can only handle so much information at a given time. Thus in the domain of personal safety, where things unfold quickly and seconds are often the difference between life and death, how we direct our attention is paramount.

So we need to focus on a few things at a time that provide the most bang for our attentional buck. And we do that, Van Horne argues, by relying on heuristics. Heuristics are quick and dirty problem-solving and decision-making mental shortcuts our minds use to figure things out when minimal information is available and time is limited. Decisions made from heuristics aren't always perfect, but in the context of your personal safety, they're usually good enough.

In *Left of Bang*, Van Horne lays out six domains of human behavior that Marine Combat Profilers use on the battlefield in order to quickly determine whether someone is a friend or foe. To get an idea of what civilians should look for in everyday situations, I interviewed Van Horne for this article. He told me the most important category of clues is what he calls kinesics, an area of behavior that involves people's conscious and subconscious body language.

Within the domain of kinesics, three clusters of body language are of particular interest for situational awareness. They are: dominance/submissive behavior, comfortable/uncomfortable behavior, and interested/uninterested behavior.

Dominance/submissive behavior. Generally, most people try to get along with others, so for the most part people act in accommodating and submissive ways. Van Horne writes that dominant behavior "is an expression of the limbic system's fight response" and often manifests itself in "gestures and postures that make a person look larger to intimidate 'smaller' individuals into submission." Smaller vs. bigger here doesn't just apply to physical size, however, but also relates to relative positions of power.

Because most people get along to get along, dominant behavior often constitutes an anomaly, and the person displaying it deserves more attention. If someone acts in a pushy, authoritative, or overbearing way, it doesn't necessarily mean they're a threat; context matters. You'd expect a boss to act dominant in relation to their employees and the employees to act submissive to their boss, but seeing extreme dominant behavior exhibited by a customer towards an employee isn't as common. That's something to keep an eye on.

Comfortable/uncomfortable behavior. Most people are going to look relatively comfortable in most situations. Think about a bus or a subway ride — passengers generally appear pretty relaxed while they stare out the window or read a book. If someone looks uncomfortable, that's an anomaly that warrants extra attention, but it doesn't mean they're necessarily a threat. They could be distressed because they're late for work or maybe they just heard some bad news about a relative. Again, it's just something to keep your eye on.

Van Horne says that a common display of uncomfortable behavior you'll see from individuals up to no good is that they're "checking their six." This is when a person looks over their shoulder to see what's behind them or generally scans their surroundings.

People who are comfortable generally don't do this because they don't feel any threat. So if you see a guy looking over his shoulder a lot when he should be standing there aloof, that's an anomaly that should get your attention.

Now obviously, "checking your six" is something that situationally aware good guys do too. If you're doing it right, it shouldn't be noticeable to others, but it takes practice, and some guy with his head on a swivel might still be green. But until you verify that through further observation, be suspicious.

On the flipside, someone acting comfortable when everyone else is uncomfortable would be an anomaly. One of the ways law enforcement was able to identify the Boston Marathon bombers was that they noticed in surveillance footage that the men looked relatively calm while everyone else was running around in a panic. The reason they looked calm was because they knew the explosion was going to happen and thus weren't surprised by it, while everyone else was caught off guard.

Interested/uninterested behavior. Most people aren't paying attention to their environment. They're too caught up in their own thoughts or whatever it is they're doing. So individuals who are showing interest in a particular person or object that most people wouldn't be interested in is an anomaly that warrants further observation.

These three body language clusters establish baselines for every situation in which we find ourselves and allow us to direct our limited attention towards things that are potentially more important and/or dangerous. If a person's behavior across these clusters fits the baseline for that particular circumstance, you can pretty much ignore them. If their behavior doesn't fit the baseline, they're an anomaly and you should observe them more closely.

Other Behavioral Threat Indicators

Besides the above three kinesic clusters, Marine Combat Profilers are taught to look out for a couple other behaviors that could apply to civilian situations as well:

Shifty hands. Military and law enforcement officers typically check the hands first on any person with whom they're engaging. This is for two reasons. First, "checking the hands of a person ensures that the person is not holding a weapon and is not preparing to strike," writes Van Horne. Second, hands often telegraph hidden nefarious intentions. People who are concealing something they don't want discovered, like a gun, knife, or stolen object, "will often touch or pat that area on the body where that object is concealed, as if to ensure the object has not been lost or is still hidden from view."

"Acting Natural." It's difficult to "act natural" when you're not completely focused on whatever it is you're really supposed to be doing. People "acting natural" will appear distracted and over- or under-exaggerate their movements. Insurgents in Afghanistan will often try to act like farmers, when they're in fact attempting to collect information on U.S.

military patrols. Marine Combat Profilers are trained to look for these "farmers" who appear to be trying too hard.

Have a Plan of Action Based on What You Observe

You visit your favorite coffee shop and a bad guy with a gun decides to drop in as well. But because you've followed the principles above, you're the first to see him as a threat. Great. But what are you going to do about it? Seconds matter here. You don't have time to formulate a well-thought-out plan. What's more, the stress of the event will muddle your thinking and decision-making.

In addition to asking yourself the baseline and anomaly questions every time you enter an environment, Van Horne suggests you ask yourself a third question: "What would I do if I saw an anomaly?" In other words, come up with an action plan.

So let's go back to the coffee shop example. Let's say the anomaly for which you want to create an action plan is "guy comes in with a gun." The best course of action in this scenario depends on a few things. And knowing what those few things are requires you to be situationally aware. If the robber came in from the front door and you're near the rear exit, your best action would be to book it out the back door right away. On the other hand, if he entered through the back exit near you, according to the Department of Homeland Security, your best action would be to immediately close the gap between him and you and incapacitate him.

Establish baselines. Look for anomalies. Have a plan.

That's what situational awareness comes down to.

Situational Awareness as a Preventive Tactic

Animals are creatures of opportunity. They'll typically only attack another creature if they look vulnerable. Lions will go after younger, sicker, or older gazelles because they're easier to catch. The same goes with humans. Criminals are typically going to go after a person who looks vulnerable, whether the victim is physically weaker or will simply be easy to catch off guard.

Practicing situational awareness goes a long way in keeping you from appearing like an easy target. When you're out and about, look alert. Get your nose out of your smartphone. When you're walking back to your car at night, have your keys at the ready and constantly scan your surroundings. The less vulnerable you look, the less likely someone is going to mess with you.

Here's another tip on not looking like a victim, from the guys at [Sage Dynamics](#): Always keep a tactical flashlight on you and bust it out at nighttime. Having a light allows you to better observe in the darkness, but it can also act as a deterrent to would-be bad guys. Because law enforcement officers are usually the only ones shining flashlights down alleys and under cars, if you're shining your light as you walk to your destination or back to your car, the bad guys are probably going to think you're a cop and will likely just leave you alone. If worst comes to worst and you do end up getting jumped, you can use the tactical flashlight as a defensive tool by blinding your would-be attacker with the bright beam or even hitting him with the beveled edge that's often built into the handle.

Practice, Practice, Practice



Situational awareness is a mindset that you have to purposefully cultivate. You want to get to the point that it's just something you do without having to think about it. To get to that point, you have to practice it regularly. Starting today, consciously remind yourself to look for entry/exit points whenever you enter a new building. Start observing people and establishing baselines and generating possible anomalies while you're at work, at the gym, or on a date. And then start coming up with action plans on what you would do in that specific situation if you see a possible threat. Don't be paranoid, just mindful. Do that day in and day out, and situational awareness won't be something you have to intentionally think about, just something you do naturally. And not fake farmer natural, but Jason Bourne natural.

Until next time, keep your head on a swivel, check your six, and keep your back to the wall.

Oh, and stay manly!

Further Reading and Resources on Situational Awareness

[Podcast: Situation Awareness With Patrick Van Horne](#): We talked with Patrick Van Horne about how situational awareness skills can be used beyond the battlefield.

[Left of Bang](#) by Patrick Van Horne and Jason A. Riley. Patrick has spent his career researching and teaching situational awareness to Marines through the Marine Combat Profiling system that he helped create. This book, coupled with the articles at his site cp-journal.com and a personal interview with him went a long way in helping answer my questions.

[www.cp-journal.com](#). This is Patrick's company website. He has tons of free content that provides insanely useful information on developing your situational awareness. If you're looking for something more structured, he also offers online courses.

["Toward a Theory of Situation Awareness"](#) by Dr. Mica Endsley. Dr. Mica Endsley is the Chief Scientist at the U.S. Air Force. While Dr. Endsley's paper is pretty technical, she does a fantastic job explaining the minutia and nuances of situational awareness that helped clarify a few things for me. I highly recommend you check it out.

[Streetlights and Shadows: Searching for the Keys to Adaptive Decision Making](#) by Gary Klein

[The Gift of Fear](#) by Gavin de Becker

Related Posts



[How to Look Behind You \(Without Looking Behind You\)](#)



[The Sioux Guide to Situational Awareness](#)



[10 Tests, Exercises, and Games to Heighten Your Senses and Situational Awareness](#)



[How to Ram Through a Vehicular Roadblock](#)



[How to Track a Human](#)



[How to Develop a Manly Voice \[VIDEO\]](#)

Tags: [Self-Defense & Fighting](#)

[**<<< PREVIOUS**](#)

[**NEXT >>**](#)

The Art of Manliness

Copyright © 2022 All Rights Reserved

[CONTACT](#) [LEGAL](#) [ABOUT](#) [ALL TOPICS](#) [ARCHIVES](#)

The Art of Manliness participates in affiliate marketing programs, which means we get paid commissions on editorially chosen products purchased through our links. We only recommend products we genuinely like, and purchases made through our links support our mission and the free content we publish here on AoM.

**WIKIPEDIA**
The Free Encyclopedia[Article](#) [Talk](#)[Not logged in](#) [Talk](#) [Contributions](#) [Create account](#) [Log in](#)[Read](#) [Edit](#) [View history](#) Search Wikipedia

Situation awareness

From Wikipedia, the free encyclopedia

[Main page](#)[Contents](#)[Current events](#)[Random article](#)[About Wikipedia](#)[Contact us](#)[Donate](#)[Contribute](#)[Help](#)[Learn to edit](#)[Community portal](#)[Recent changes](#)[Upload file](#)[Tools](#)[What links here](#)[Related changes](#)[Special pages](#)[Permanent link](#)[Page information](#)[Cite this page](#)[Wikidata item](#)[Print/export](#)[Download as PDF](#)[Printable version](#)[Languages](#) [Deutsch](#)[Español](#)[العربية](#)[Bahasa Indonesia](#)[Italiano](#)[Latviešu](#)[日本語](#)[中文](#)[Edit links](#)

Contents [hide]

- 1 History
- 2 Related concepts
 - 2.1 Situation understanding
 - 2.2 Situational assessment
 - 2.3 Mental models
 - 2.4 Sensemaking
- 3 Theoretical model
 - 3.1 Causal models of SA
 - 3.2 Endsley's model
 - 3.3 Criticism of model
- 4 In team operations
 - 4.1 Team SA
 - 4.2 Shared SA
 - 4.3 Team SA model
- 5 In time critical decision-making processes
- 6 Measurement
 - 6.1 Objective measures
 - 6.2 Subjective measures
 - 6.3 Performance and behavioral measures
 - 6.4 Process indices
 - 6.5 Multi-faceted approach to measurement
- 7 Limitations
- 8 Training
- 9 On-the-job examples
 - 9.1 Emergency medical call-outs

9.2	Vehicle driving
9.3	Search and rescue
9.4	Forestry crosscut saw / chainsaw
9.5	Law enforcement
9.6	Cybersecurity threat operations
10	Situation awareness-based agency transparency model
11	Methods of gaining situational awareness
11.1	Crowdsourcing
11.2	Cloud-based geographic information system display of structured data
11.3	Military training methods
12	See also
13	Notes
14	References
15	Sources
16	Further reading
17	External links

History [edit]

Although the term itself is fairly recent, the concept has roots in the history of military theory—it is recognizable in Sun Tzu's *The Art of War*, for example.^[12] The term can be traced to World War I, where it was recognized as a crucial skill for crews in military aircraft.^[13]

There is evidence that the term *situational awareness* was first employed at the Douglas Aircraft Company during human factors engineering research while developing vertical and horizontal situation displays and evaluating digital-control placement for the next generation of commercial aircraft. Research programs in flight-crew computer interaction^[14] and mental workload measurement^[15] built on the concept of awareness measurement from a series of experiments that measured contingency awareness during learning.^{[16][17]} and later extended to mental workload and fatigue.^[18]

Situation awareness appears in the technical literature as early as 1983, when describing the benefits of a prototype touch-screen navigation display.^[19] During the early 1980s, integrated "vertical-situation" and "horizontal-situation" displays were being developed for commercial aircraft to replace multiple electro-mechanical instruments. Integrated situation displays combined the information from several instruments enabling more efficient access to critical flight parameters, thereby improving situational awareness and reducing pilot workload.

Before being widely adopted by human factors scientists in the 1990s, the term is said to have been used by United States Air Force (USAF) fighter aircrew returning from war in Korea and Vietnam.^[20] They identified having good SA as the decisive factor in air combat engagements—the "ace factor".^[21] Survival in a dogfight was typically a matter of observing the opponent's current move and anticipating his next move a fraction of a second before he could observe and anticipate it himself. USAF pilots also came to equate SA with the "observe" and "orient" phases of the famous observe-orient-decide-act loop (OODA loop), or Boyd cycle, as described by the USAF war theorist Col. John Boyd. In combat, the winning strategy is to "get inside" your opponent's OODA loop, not just by making one's own decisions quicker, but also by having better SA than one's opponent, and even changing the situation in ways that the opponent cannot monitor or even comprehend. Losing one's own SA, in contrast, equates to being "out of the loop".

Clearly, SA has far-reaching applications, as it is necessary for individuals and teams to function effectively in their environment. Thus, we are beginning to see SA going beyond the field of aviation to work being conducted in a wide variety of environments. Currently,^[when?] SA is being studied in such diverse areas as air traffic control, nuclear power plant operation, vehicle operation, and anesthesiology.^{[22][23][24][25][26]}

Related concepts [edit]

Several cognitive processes related to situation awareness are briefly described in this section. The matrix shown below attempts to illustrate the relationship among some of these concepts.^[27] Note that *situation awareness* and *situational assessment* are more commonly discussed in information fusion complex domains such as aviation and military operations and relate more to achieving immediate tactical objectives.^{[28][29][30]} Sensemaking and achieving *understanding* are more commonly found in industry and the organizational psychology literature and often relate to achieving long-term strategic objectives.

		Phase	
		Process	Outcome
Objective	Tactical (short-term)	situational assessment	situation awareness
	Strategic (long-term)	sensemaking	understanding
	Scientific (longer-term)	analysis	prediction

Situational understanding [edit]

Situation awareness is sometimes confused with the term "situational understanding." In the context of military command and control applications, situational understanding refers to the "product of applying analysis and judgment to the unit's situation awareness to determine the relationships of the factors present and form logical conclusions concerning threats to the force or mission accomplishment, opportunities for mission accomplishment, and gaps in information".^[31] Situational understanding is the same as Level 2 SA in the Endsley model—the comprehension of the meaning of the information as integrated with each other and in terms of the individual's goals. It is the "so what" of the data that is perceived.

Situational assessment [edit]

In brief, situation awareness is viewed as "a state of knowledge," and situational assessment as "the processes" used to achieve that knowledge. Endsley argues that "it is important to distinguish the term situation awareness, as a state of knowledge, from the processes used to achieve that state."^[1] These processes, which may vary widely among individuals and contexts, will be referred to as situational assessment or the process of achieving, acquiring, or maintaining SA." Note that SA is not only produced by the processes of situational assessment, it also drives those same processes in a recurrent fashion. For example, one's current awareness can determine what one pays attention to next and how one interprets the information perceived.^[32]

Mental models [edit]

Accurate mental models are one of the prerequisites for achieving SA.^{[33][34]} A mental model can be described as a set of well-defined, highly organized yet dynamic knowledge structures developed over time from experience.^{[35][36]} The volume of available data inherent in complex operational environments can overwhelm the capability of novice decision makers to attend, process, and integrate this information efficiently, resulting in information overload and negatively impacting their SA.^[37] In contrast, experienced decision makers assess and interpret the current situation (Level 1 and 2 SA) and select an appropriate action based on conceptual patterns stored in their long-term memory as "mental models".^[38] Cues in the environment activate these mental models, which in turn guide their decision making process.

Sensemaking [edit]

Klein, Moon, and Hoffman distinguish between situation awareness and sensemaking as follows:

.. situation awareness is about the knowledge state that's achieved—either knowledge of current data elements, or inferences drawn from these data, or predictions that can be made using these inferences. In contrast, sensemaking is about the process of achieving these kinds of outcomes, the strategies, and the barriers encountered.^[39]

In brief, sensemaking is viewed more as "a motivated, continuous effort to understand connections (which can be among people, places, and events) in order to anticipate their trajectories and act effectively"^[40] rather than the state of knowledge underlying situation awareness. Endsley points out that as an effortful process, sensemaking is actually considering a subset of the processes used to maintain situation awareness.^[41] In the vast majority of the cases, SA is instantaneous and effortless, proceeding from pattern recognition of key factors in the environment—"The speed of operations in activities such as sports, driving, flying and air traffic control practically prohibits such conscious deliberation in the majority of cases, but rather reserves it for the exceptions." Endsley also points out that sensemaking is backward focused, forming reasons for past events, while situation awareness is typically forward looking, projecting what is likely to happen in order to inform effective decision processes.^[41]

Theoretical model [edit]

SA can be described in terms of a holistic framework of SA systems, states, and processes.^[11] SA descriptions usually focus on one of the three aspects, or on combinations. SA states can be described as: **Objects**: Awareness of various objects in the world, and their current status. Objects and their status may be indicative of particular situations (that they are about to occur, that they are ongoing, etc.). Then they are often referred to as cues. **Frames**: Awareness of what kind of situation is on-going, e.g. a runway incursion where an aircraft is about to collide with some object on the runway.

Implications: Awareness of objects within frames, or what their current status means in a particular situation. E.g. the implications of the current speed of the aircraft, and the distance to an object on the runway, in a runway incursion situation. The implications refer to time and space, to an event horizon.

Event horizon: An awareness of plans and events in time and space. It includes an awareness of what has happened (useful for diagnosis, to achieve SA, to frame situations). It also includes prognosis, an awareness of what might happen next. That includes on the one hand an awareness both of what might occur based on diagnosis and the current situation, and on the other hand on an awareness of current plans and intentions.

All four aspects may drive SA processes. Being aware of the status of particular objects (cues), one might infer that particular situations are on-going, and frame the objects accordingly. The cues then drive re-framing of situations. Having a particular frame, or pre-conception of a situation, this may drive the perception of objects. E.g. having noticed that a landing is about to occur, an Air Traffic Controller will usually look for specific objects in the environment and update the awareness of their status. Further, having realized the implications of objects of their status, this drives the process of what to attend to next. E.g. knowing that a vehicle is approaching a runway where a landing is about to take place, an Air Traffic Controller may monitor its progress. Event horizon awareness may also guide SA, e.g. if one plans to stop the car at a gas station, one may look for gas station signs.

Further, to describe SA in e.g. teams, the distribution of SA must be considered, e.g. in terms of:

- **Shared SA**: What SA different agents have in common
- **Task SA**: What SA different agents have, that they need to perform their tasks
- **Transactive SA**: Exchange of SA between system parts
- **Buffering SA**: Awareness of different accounts (e.g., different frames) of situations, in various parts of the system.

Causal models of SA [edit]

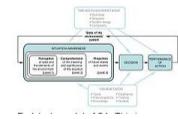
A recent holistic framework^[42] has shown how SA emerges from causal mental models, where beliefs about causal relationships in the world are represented in the structure of the model and beliefs about the state of the world are reflected in the state of the model. Causal models support inferences about causes and consequences, as well as counterfactual thinking^[43] and allow us to ask questions of why?, so-what?, and what-if?, that support SA comprehension and projection as well as naturalistic decision-making. When instantiated as a Bayesian network, these models also allow evaluation of the search for information and the integration of new information with existing knowledge. A computational causal model quantitatively predicted search behavior and changes in SA in fighter pilots.^[42]

Endsley's model [edit]

The SA states framework above extends an older (but simpler), theoretical framework of SA, provided by Dr. Mica Endsley.^[22] which has historically been widely used [citation needed]. Endsley's model describes SA states, and illustrates three stages or steps of SA formation: perception, comprehension, and projection.

Perception (Level 1 SA): The first step in achieving SA is to perceive the status, attributes, and dynamics of relevant elements in the environment. Thus, Level 1 SA, the most basic level of SA, involves the processes of monitoring, cue detection, and simple recognition, which lead to an awareness of multiple situational elements (objects, events, people, systems, environmental factors) and their current states (locations, conditions, modes, actions).

Comprehension (Level 2 SA): The next step in SA formation involves a synthesis of disjointed Level 1 SA elements through the processes of pattern recognition, interpretation, and evaluation. Level 2 SA requires integrating this information to understand how it will impact upon the individual's goals and objectives. This includes developing a comprehensive picture of the world, or of that portion of the world of concern to the individual.



Projection (Level 3 SA) The third and highest level of SA involves the ability to project the future actions of the elements in the environment. Level 3 SA is achieved through knowledge of the status and dynamics of the elements and comprehension of the situation (Levels 1 and 2 SA), and then extrapolating this information forward in time to determine how it will affect future states of the operational environment.

Endsley's model of SA also illustrates several variables that can influence the development and maintenance of SA, including individual, task, and environmental factors. For example, individuals vary in their ability to acquire SA; thus, simply providing the same system and training will not ensure similar SA across different individuals. Endsley's model shows how SA "provides the primary basis for subsequent decision making and performance in the operation of complex, dynamic systems".^[46] Although alone it cannot guarantee successful decision making, SA does support the necessary input processes (e.g., cue recognition, situation assessment, prediction) upon which good decisions are based.^[47]

SA also involves both a temporal and a spatial component. Time is an important concept in SA, as SA is a dynamic construct, changing at a tempo dictated by the actions of individuals, task characteristics, and the surrounding environment. As new inputs enter the system, the individual incorporates them into this mental representation, making changes as necessary in plans and actions in order to achieve the desired goals. SA also involves spatial knowledge about the activities and events occurring in a specific location of interest to the individual. Thus, the concept of SA includes perception, comprehension, and projection of situational information, as well as temporal and spatial components.

In summary, the model consists of several key factors:^[48]

- Perception, comprehension, and projection as three levels of SA.
- The role of goals and goal directed processing in directing attention and interpreting the significance of perceived information.
- The role of information salience in "grabbing" attention in a data-driven fashion, and the importance of alternating goal-driven and data-driven processing.
- The role of expectations (fed by the current model of the situation and by long-term memory stores) in directing attention and interpreting information.
- The heavy demands on limited working memory restricting SA for novices and for those in novel situations, but the tremendous advantages of mental models and pattern matching to prototypical schema that largely circumvent these limits.
- The use of mental models for providing a means for integrating different bits of information and comprehending its meaning (relevant to goals) and for allowing people to make useful projections of likely future events and states.
- Pattern matching to schema—prototypical states of the mental model—that provides rapid retrieval of comprehension and projection relevant to the recognized situation and in many cases single-step retrieval of appropriate actions for the situation.

Criticism of model [\[edit\]](#)

Any model of situation awareness depends on cognitive and shared cognitive processes, and yet "...models of SA refer to cognitive processes in general terms, but do not specify exactly what processes are involved and to what extent."^[49] This criticism is an example of the difficulty that cognitive science has in addressing a concept such as SA, which through its definition and assumptions appears to stand robustly, however when the theorized processes are exposed at the cognitive level of analysis assumptions must be radically reviewed. Researchers have regularly raised these concerns - notably by Flach in 1995^[49] and by Banbury & Tremblay in 2004.^[50] To date the most widely cited model of SA is lacking in support from cognitive science, one notable observation that still stands is that:

The test of situation awareness as a construct will be in its ability to be operationalized in terms of objective, clearly specified independent (stimulus manipulation) and dependent (response difference) variables ... Otherwise, SA will be yet another buzzword to cloak scientists' ignorance.

— Flach, 1995, p. 155^[51]

Another criticism of the model comes from a study done in 2015 which looked at situational awareness in tasks where relevant knowledge about the task could be found through other mediums, other than directly asking the collaborator. It was found that in these types of tasks, verbal communication lengthens the time it takes to complete a task when compared to people completing a task individually.^[52]

In team operations [\[edit\]](#)

In many systems and organizations, people work not just as individuals, but as members of a team. Thus, it is necessary to consider the SA of not just individual team members, but also the SA of the team as a whole. To begin to understand what is needed for SA within teams, it is first necessary to clearly define what constitutes a team. A team is not just any group of individuals; rather teams have a few defining characteristics. A team is:

a distinguishable set of two or more people who interact dynamically, interdependently and adaptively toward a common and valued goal/objective/mission, who have each been assigned specific roles or functions to perform, and who have a limited life span of membership.

— Salas et al. (1992)^[53]

Team SA [\[edit\]](#)

Team SA is defined as "the degree to which every team member possesses the SA required for his or her responsibilities".^[54] The success or failure of a team depends on the success or failure of each of its team members. If any one of the team members has poor SA, it can lead to a critical error in performance that can undermine the success of the entire team. By this definition, each team member needs to have a high level of SA on those factors that are relevant for his or her job. It is not sufficient for one member of the team to be aware of critical information if the team member who needs that information is not aware.

In a team, each member has a subgoal pertinent to his/her specific role that feeds into the overall team goal. Associated with each member's subgoal are a set of SA elements about which he/she is concerned. Team SA, therefore, can be represented as shown in Figure 2. As the members of a team are essentially interdependent in meeting the overall team goal, some overlap between each member's subgoal and their SA requirements will be present. It is this subset of information that constitutes much of team coordination. That coordination may occur as a verbal exchange, a duplication of displayed information, or by some other means.

Shared SA [\[edit\]](#)

Shared situation awareness can be defined as "the degree to which team members possess the same SA on shared SA requirements".^{[55][56]} As implied by this definition, there are information requirements that are relevant to multiple team members. A major part of teamwork involves the area where these SA requirements overlap—the shared SA requirements that exist as a function of the essential interdependency of the team members. In a poorly functioning team, two or more members may have different assessments on these shared SA requirements and thus behave in an uncoordinated or even counter-productive fashion. Yet in a smoothly functioning team, each team member shares a common understanding of what is happening on those SA elements that are common—shared SA. Thus, shared SA refers to the overlap between the SA requirements of the team members, as presented in Figure 3. As depicted by the clear areas of the figure, not all information needs to be shared. Clearly, each team member is aware of much that is not pertinent to the others.

Endsley's model of SA. This is a synthesis of models she has given in several sources, notably in 1995^[44] and 2000.^[45] Drawn by Dr Peter Lankton, May 2007. [citation needed]

on the team. Sharing every detail of each person's job would only create a great deal of "noise" to sort through to get needed information. It is only that information which is relevant to the SA requirements of each team member that is needed.

Team SA model [edit]

The situation awareness of the team as a whole, therefore, is dependent upon both a high level of SA among individual team members for the aspects of the situation necessary for their job; and a high level of shared SA between team members, providing an accurate common operating picture of those aspects of the situation common to the needs of each member.^[57] Endsley and Jones^{[33][57]} describe a model of team situation awareness as a means of conceptualizing how teams develop high levels of shared SA across members. Each of these four factors—requirements, devices, mechanisms and processes—act to help build team and shared SA.

1. **Team SA requirements** – the degree to which the team members know which information needs to be shared, including their higher level assessments and projections (which are usually not otherwise available to fellow team members), and information on team members' task status and current capabilities.
2. **Team SA devices** – the devices available for sharing this information, which can include direct communication (both verbal and non-verbal), shared displays (e.g., visual or audio displays, or tactile devices), or a shared environment. As non-verbal communication, such as gestures and display of local artifacts, and a shared environment are usually not available in distributed teams, this places far more emphasis on verbal communication and communication technologies for creating shared information displays.
3. **Team SA mechanisms** – the degree to which team members possess mechanisms, such as shared mental models, which support their ability to interpret information in the same way and make accurate projections regarding each other's actions. The possession of shared mental models can greatly facilitate communication and coordination in team settings.
4. **Team SA processes** – the degree to which team members engage in effective processes for sharing SA information which may include a group norm of questioning assumptions, checking each other for conflicting information or perceptions, setting up coordination and prioritization of tasks, and establishing contingency planning among others.

In time critical decision-making processes [edit]

See also: *Window of opportunity*

There are many industries where it is critical to make a correct decision within a strict time limit, based on the decision-maker's knowledge of the current situation: for example air traffic controllers or medical providers (e.g., anesthesiologists). In these situations it is common that the key decision maker is supported by other team members or by complex monitoring systems feeding them information, which can involve multiple sources and formats of information. Even in these time-critical situations, the importance of having situation awareness (SA) is not constant: i.e. it is more critical to the outcome to have better SA for non-standard situations, such as points of high information traffic, extraneous activity and unforeseeable events. These 'points of fracture' are likely to cause additional workload on the individuals and therefore affect their SA and the time to make the decision. At the critical point the perceived situational awareness utilized to make the decision is directly affected by the cognitive workload to gain, comprehend and process the SA that is coming in to the operator, both general background SA and the SA specifically related to the decision.^[58] In other words, if everything is going OK the level of SA you have is not as critical as it is when something unusual happens or something goes wrong.

Research into the decision making process is an increasing area of interest and the identification of this type of relationship has led to the development of at least one integrated conceptual framework (developed by K. Tara Smith) that attempts to accommodate all of the impactors on the decision-making process, defining how they impact on the individual's ability to acquire their SA. This involves aligning the terms and concepts used by different research areas, so that the causal relationships can be identified and defined.

This approach of integrating situation awareness, workload, signal processing theory, decision theory, etc. tends to subtly change the questions that are asked during the analysis process from quantifying and qualifying the SA to measures of the probabilistic aspects of a decision, such as the number of interrelationships, the certainty and time-lag of the information arriving, risk to desired outcome or effect, etc.; together with the processing aspects, to do with the number of signals, accuracy and completeness of the information and importance to the operational context. In other words, instead of asking does a modification to the system provide more SA, we are asking does this modification to the system provide more SA in a form that can be used at the time when it is needed?

Measurement [edit]

While the SA construct has been widely researched, the multivariate nature of SA poses a considerable challenge to its quantification and measurement.^[60] In general, techniques vary in terms of direct measurement of SA (e.g., objective real-time probes or subjective questionnaires assessing perceived SA) or methods that infer SA based on operator behavior or performance. Direct measures are typically considered to be "product-oriented" in that these techniques assess an SA outcome; inferred measures are considered to be "process-oriented," focusing on the underlying processes or mechanisms required to achieve SA.^[59] These SA measurement approaches are further described next.

Objective measures [edit]

Objective measures directly assess SA by comparing an individual's perceptions of the situation or environment to some "ground truth" reality. Specifically, objective measures collect data from the individual on his or her perceptions of the situation and compare them to what is actually happening to score the accuracy of their SA at a given moment in time. Thus, this type of assessment provides a direct measure of SA and does not require operators or observers to make judgments about situational knowledge on the basis of incomplete information. Objective measures can be gathered in one of three ways: real-time as the task is completed (e.g., "real-time probes" presented as open questions embedded as verbal communications during the task^[60]), during an interruption in task performance (e.g., situation awareness global assessment technique (SAGAT)^[64] or the WOMBAT situational awareness and stress tolerance test mostly used in aviation since the late 1980s and often called HUPEX in Europe), or post-test following completion of the task.

Subjective measures [edit]

Subjective measures directly assess SA by asking individuals to rate their own or the observed SA of individuals on an anchored scale (e.g., participant situation awareness questionnaire,^[61] the situation awareness rating technique^[62]). Subjective measures of SA are attractive in that they are relatively straightforward and easy to administer. However, several limitations should be noted. Individuals making subjective assessments of their own SA are often unaware of information they do not know (the unknown unknowns). Subjective measures also tend to be global in nature, and, as such, do not fully exploit the multivariate nature of SA to provide the detailed diagnostics available with objective measures. Nevertheless, self-ratings may be useful in that they can provide an assessment of operators' degree of confidence in their SA and their own performance. Measuring how SA is perceived by the operator may provide information as important as the operator's actual SA, since errors in perceived SA quality (over-confidence or under-confidence in SA) may have just as harmful an effect on an individual's or team's decision-making as errors in their actual SA.^[63]

Subjective estimates of an individual's SA may also be made by experienced observers (e.g., peers, commanders, or trained external experts). These observer ratings may be somewhat superior to self-ratings of SA because more information about the true state of the environment is usually available to the observer than to the operator, who may be focused on performing the task (i.e., trained observers may have more complete knowledge of the situation). However, observers have only limited knowledge about the operator's concept of the situation and cannot have complete insight into the mental state of the individual being evaluated. Thus, observers are forced to rely more on operators' observable actions and verbalizations in order to infer their level of SA. In this case, such actions and verbalizations are best assessed using performance and behavioral measures of SA, as described next.

Performance and behavioral measures [edit]

Performance measures infer SA from the end result (i.e., task performance outcomes), based on the assumption that better performance indicates better SA. Common performance metrics include quantity of output or productivity level, time to perform the task or respond to an event, and the accuracy of the response or, conversely, the number of errors committed. The main advantage of performance measures is that these can be collected objectively and without disrupting task performance. However, although evidence exists to suggest a positive relation between SA and performance, this connection is probabilistic and not always direct and unequivocal.^[22] In other words, good SA does not always lead to good performance and poor SA does not always lead to poor performance.^[64] Thus, performance measures should be used in conjunction with others measures of SA that directly assess this construct.

Behavioral measures also infer SA from the actions that individuals choose to take, based on the assumption that good actions will follow from good SA and vice versa. Behavioral measures rely primarily on observer ratings, and are, thus, somewhat subjective in nature. To address this limitation, observers can be asked to evaluate the degree to which individuals are carrying out actions and exhibiting behaviors that would be expected to promote the achievement of higher levels of SA.^[65] This approach removes some of the subjectivity associated with making judgments about an individual's internal state of knowledge by allowing them to make judgments about SA indicators that are more readily observable.

Process indices [edit]

Process indices examine how individuals process information in their environment, such as by analyzing communication patterns between team members or using eye tracking devices. Team communication (particularly verbal communication) supports the knowledge building and information processing that leads to SA construction.^[33] Thus, since SA may be distributed via communication, computational linguistics and machine learning techniques can be combined with natural language analytical techniques (e.g., Latent semantic analysis) to create models that draw on the verbal expressions of the team to predict SA and task performance.^{[66][67]} Although evidence exists to support the utility of communication analysis for predicting team SA,^[68] time constraints and technological limitations (e.g., cost and availability of speech recording systems and speech-to-text translation software) may make this approach less practical and viable in time-pressed, fast-paced operations.

Psycho-physiological measures also serve as process indices of operator SA by providing an assessment of the relationship between human performance and a corrected change in the operator's physiology.^[69] In other words, cognitive activity is associated with changes in the operator's physiological states. For example, the operator's overall functional state (as assessed using psycho-physiological measures, such as electroencephalography data, eyetracks, and cardiac activity) may provide an indication as to whether the operator is sleep fatigued at one end of the continuum, or mentally overloaded at the other end.^[70] Other psycho-physiological measures, such as event-related potentials, event-related desynchronization, transient heart rate, and electrodermal activity, may be useful for evaluating an operator's perception of critical environmental cues, that is, to determine if the operator has detected and perceived a task-relevant stimulus.^[70] In addition, it is also possible to use psycho-physiological measures to monitor operators' environmental expectancies, that is, their physiological responses to upcoming events, as a measure of their current level of SA.^[70]

Multi-faceted approach to measurement [edit]

The multivariate nature of SA significantly complicates its quantification and measurement, as it is conceivable that a metric may only tap into one aspect of the operator's SA. Further, studies have shown that different types of SA measures do not always correlate strongly with each other.^[60] Accordingly, rather than rely on a single approach or metric, valid and reliable measurement of SA should utilize a battery of distinct yet related measures that complement each other.^[71] Such a multi-faced approach to SA measurement capitalizes on the strengths of each measure while minimizing the limitations inherent in each.

Limitations [edit]

Situation awareness is limited by sensory input and available attention, by the individual's knowledge and experience, and by their ability to analyse the available information effectively. Attention is a limited resource, and may be reduced by distraction and task loading. Comprehension of the situation and projection of future status depend heavily on relevant knowledge, understanding, and experience in similar environments. Team SA is less limited by these factors, as there is a wider knowledge and experience base, but it is limited by the effectiveness of communication within the team.^[72]

Training [edit]

Following Endsley's paradigm and with cognitive resource management model^[73] with neurofeedback techniques, Spanish Pedagogist María Gabriela López García (2010) implemented and developed a new SA training pattern.^[74] The first organization to implement this new pattern design by López García is the SPAF (Spanish Air Force). She has trained EF-18 fighter pilots and Canadair firefighters.^[75]

This situation awareness training aims to avoid losing SA and provide pilots cognitive resources to always operate below the maximum workload that they can withstand. This provides not only a lower probability of incidents and accidents by human factors, but the hours of operation are at their optimum efficiency, extending the operating life of systems and operators.^[76]

On-the-job examples [edit]

Emergency medical call-outs [edit]

In first aid medical training provided by the American Red Cross, the need to be aware of the situation within the area of influence as one approaches an individual requiring medical assistance is the first aspect for responders to consider.^[77] Examining the area and being aware of potential hazards, including the hazards which may have caused the injuries being treated, is an effort to ensure that responders do not themselves get injured and require treatment as well.

Situation awareness for first responders in medical situations also includes evaluating and understanding what happened^[78] to avoid injury of responders and also to provide information to other rescue agencies which may need to know what the situation is via radio prior to their arrival on the scene.

In a medical context, situation awareness is applied to avoid further injury to already-injured individuals, to avoid injury to medical responders, and to inform other potential responders of hazardous conditions prior to their arrival.

Vehicle driving [edit]

A loss in situational awareness has led to many transportation disasters, including the 2015 Philadelphia train derailment.^[79]

Search and rescue [edit]

Within the search and rescue context, situational awareness is applied primarily to avoid injury to search crews however being aware of the environment, the law of the land, and the many other factors of influence within one's surroundings assists in the location of injured or

missing individuals^[80][self-published source] Public safety agencies are increasingly using situational awareness applications like Android Tactical Assault Kit on mobile devices to improve situational awareness.^[81]

Forestry crosscut saw / chainsaw [\[edit\]](#)

In the United States Forest Service the use of chainsaws and crosscut saws requires training and certification.^[82] A great deal of that training describes situational awareness as an approach toward environmental awareness but also self-awareness^[83] which includes being aware of one's own emotional attitude, tiredness, and even caloric intake.

Situational awareness in the forest context also includes evaluating the environment and the potential safety hazards within a saw crew's area of influence. As a sawyer approaches a task, the ground, wind, cloud cover, hillsides, and many other factors are examined and are considered proactively as part of trained sawyers' ingrained training.

Dead or diseased trees within the reach of saw team crews are evaluated, the strength and direction of the wind is evaluated. The lay of tree sections to be bucked or the lean of a tree to be felled is evaluated within the context of being aware of where the tree will fall or move to when cut, where the other members of the saw team are located, how they are moving, whether hikers are within the area of influence, whether hikers are moving or are stationary.

Law enforcement [\[edit\]](#)

Law enforcement training includes being situationally aware of what is going on around the police officer before, during, and after interactions with the general public^[84] while also being fully aware of what is happening around the officer in areas not currently the focus of an officer's immediate task.

Cybersecurity threat operations [\[edit\]](#)

In cybersecurity, consider situational awareness, for threat operations, is being able to perceive threat activity and vulnerability in context so that the following can be actively defended: data, information, knowledge, and wisdom from compromise. Situational awareness is achieved by developing and using solutions that often consume data and information from many different sources. Technology and algorithms are then used to apply knowledge and wisdom in order to discern patterns of behavior that point to possible, probable, and real threats.

Situational awareness for cybersecurity threat operations teams appears in the form of a condensed, enriched, often graphical, prioritized, and easily searchable view of systems that are inside or related to security areas of responsibility (such as corporate networks or those used for national security interests). Different studies have analyzed the perception of security and privacy in the context of eHealth,^[85] network security,^[86] or using collaborative approaches to improve the awareness of users.^[87] There are also research efforts to automate the processing of communication network information in order to obtain or improve cyber-situational awareness.^[88]

Situation awareness-based agency transparency model [\[edit\]](#)

As the capabilities of technological agents increases, it becomes more important that their actions and underlying rational becomes transparent. In the military realm, agent transparency has been investigated as unmanned vehicles are being employed more frequently. In 2014, researchers at the U.S. Army Research Laboratory reported the Situation Awareness-based Agent Transparency (SAT), a model designed to increase transparency through user interface design. When it comes to automation, six barriers that have been determined to discourage human trust in "low observability, predictability, directability and audibility... [and] low mutual understanding of common goals."^[89] The researchers at the US Army Research Laboratory designed three levels of situational awareness transparency based on Endsley's theory of perception, comprehension, and projection. The greater the level of situational awareness, they claimed, the more information the agent conveys to the user.^[90]

A 2018 publication from the U.S. Army Research Laboratory evaluated how varying transparency levels in the SAT affects the operator workload and a human's understanding of when it is necessary to intervene in the agent's decision making. The researchers refer to this supervisory judgement as calibration. The group split their SAT model research into two efforts: the Intelligent Agent Transparency in Human Agent Transparency for Multi Uxv^[clarification needed] Management (IMPACT) and the Autonomous Squad Member (ASM) projects.^[89] Scientists provided three standard levels of SAT in addition to a fourth level which included the agent's level of uncertainty in its decision in unmanned vehicles. The stated goal of this research was to determine how modifying levels of SAT affected user performance, situation awareness, and confidence in the agent. The scientists stated that their experimental results support that increased agent transparency improved the performance of the operator and human confidence on the agent without a significant effect on the workload. When the agent communicated levels of uncertainty in the task assigned, those involved in the experimentation displayed more trust in the agent.^[91]

The ASM research was conducted by providing a simulation game in which the participant had to complete a training course with an ASM, a ground robot that communicates with infantry. The participants had to multitask, evaluating potential threats while monitoring the ASM's communications on the interface. According to that research, experimental results demonstrated that the greatest confidence calibration occurred when the agent communicated information of all three levels of SAT.^[91] The group of scientists from the U.S. Army Research Laboratory developed transparency visualization concepts in which the agents can communicate their plans, motivations, and projected outcomes through icons. The agent has been reported to be able to relate its resource usage, reasoning, predicted resource loss, progress towards task completion, etc.^[92] Unlike in the IMPACT research, the agent informing the user of its level of uncertainty in decision making, no increase in trust was observed.^[91]

Methods of gaining situational awareness [\[edit\]](#)

This section needs expansion
You can help by adding to it.
(January 2017)

Crowdsourcing [\[edit\]](#)

Crowdsourcing, made possible by the rise of social media and ubiquitous mobile access has a potential for considerably enhancing situation awareness of both responsible authorities and citizens themselves for emergency and crisis situations by employing or using "citizens as sensors".^{[92][93][94][95][96][97][98][99]} For instance, analysis of content posted on online social media like Facebook and Twitter using data mining, machine learning and natural language processing techniques may provide situational information.^[99] A crowdsourcing approach to sensing, particularly in crisis situations, has been referred to as *crowdsensing*.^[100] Crowdmapping is a subtype of crowdsourcing^{[101][102]} by which aggregation of crowd-generated inputs such as captured communications and social media feeds are combined with geographic data to create a digital map that is as up-to-date as possible^{[103][104][105][106]} that can improve situational awareness during an incident and be used to support incident response.^[107]

Cloud-based geographic information system display of structured data [\[edit\]](#)

Since 2012 the National Information Sharing Consortium (NISC) has worked to provide "the right information to the right people at the right time" by use of common terminology among the emergency management community and first-responders with a mission of

standardizing the structured geo-spatial data to be shared online over a variety of platforms. The result is to create a Common Operating Picture (COP) that generates accurate and timely information displayed visually, both at the strategic level for decision makers and at the tactical level for people on site. The NISC promotes the sharing of code, data widgets, and training in order to increase the quality of the situational awareness. Large scale exercises like the Capstone-14 week-long event coordinated by the Central United States Earthquake Consortium (CUSEC) and actual operational use of these data sharing methods have also advanced the work of NISC to expand the usability of GIS-based information sharing for enhanced situational awareness.

Military training methods [edit]

See also: [Maritime domain awareness](#)

There are two training scenarios designed to increase the situational awareness skills of military professionals, and first responders in police and emergency services. The first, Kim's Game, has a more common place in the Marine Corps sniper school and police academies. The name is derived from the novel *Kim* which references the game to a spy school lesson. The game involves a tray with various items such as spoons, pencils, bullets, and any other items the soldiers would be familiar with. The participants would be given one minute to view all of these items before they are covered up with a blanket. The participants would then individually list the items that they saw, the one with the most correct answers would win the game. The same game is played in young scouting and girl guide groups as well to teach children quick memorisation skills.

The second method is a more practical military application of Kim's Game. It starts with a field area (jungle, bush or forest) of about five meters wide to 10 meters deep where various items, some camouflaged and some not, to be located in the area on the ground and in the trees at eye-level. Again, these items would be ones that are familiar to the soldiers undergoing the exercise. The participants would be given 10 minutes to view the area from one place and take a mental note of the items they saw. Once their 10 minutes is up, the soldier would then be required to do a repetition of certain exercises such as burpees, designed to simulate the stress of a physically demanding environment. Once the participant completes the exercise, they would list the items they saw. The points would be tallied in the end to find the winner.

See also [edit]

- Alert state
- Aviation safety – State in which risks associated with aviation are at an acceptable level
- Brownout (aeronautics) – In-flight visual impairment by pilots
- Diving safety – Risk management of underwater diving activities
- Information integration
- Korean Air Lines Flight 007 – 1983 flight shot down by the Soviet Union
- Self-awareness – Capacity for introspection and individuation as a subject
- Situated cognition
- Situation room
- Spatial awareness
- Spatial disorientation – Inability of a person to correctly determine their body position in space
- Single-pilot resource management

Notes [edit]

- a ^ b Endsley (1995b), p. 36.
- b ^ For a detailed discussion on SA measurement, see:
- Endsley, M.R.; Garland, D.J., eds. (2000). *Situation awareness analysis and measurement*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Fracker, M.L. (1991a). Measures of situation awareness: An experimental evaluation (Report No. AL-TR-1991-0127). Wright-Patterson Air Force Base, OH: Armstrong Laboratories.
- Fracker, M.L. (1991b). Measures of situation awareness: Review and future directions (Report No. AL-TR-1991-0128). Wright-Patterson Air Force Base, OH: Armstrong Laboratories.
- c ^ See, for example, the situation awareness behaviorally anchored rating scale^{65[6]}.
- d ^ cf.:
- Durso, F.T.; Truitt, T.R.; Hackworth, C.A.; Crutchfield, J.M.; Nikolic, D.; Moerd, P.M.; Ohrt, D. & Manning, C.A. (1995). Expertise and chess: A pilot study comparing situation awareness methodologies. In D.J. Garland & M.R. Endsley (Eds.), *Experimental analysis and measurement of situation awareness* (pp. 295–303). Daytona Beach, FL: Embry-Riddle Aeronautical University Press.
- Endsley, Mica R.; Selcon, Stephen J.; Hardiman, Thomas D.; Croft, Darryl G. (1998). "A Comparative Analysis of Sagat and Sart for Evaluations of Situation Awareness"⁶⁶ (PDF). *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. Santa Monica, CA: SAGE Publications. 42 (1): 82–86. doi:10.1177/154193129804200119. ISSN 2169-5057. S2CID 38430173. Archived from the original (PDF) on 2007-09-28.
- Vidulich, M.A. (2000). Testing the sensitivity of situation awareness metrics in interface evaluations. In M.R. Endsley & D.J. Garland, (Eds.). *Situation awareness analysis and measurement* (pp. 227–246). Mahwah, NJ: Lawrence Erlbaum Associates.

References [edit]

- 1 ^ b Endsley 1995b, p. 36.
- 2 ^ Smith, K. and Hancock, P.A., 1995 & p36.
- 3 ^ Flech 1995, p. 150.
- 4 ^ a ^ b Nullmeyer, R.T.; Stella, D.; Montijo, G.A., & Harden, S.W. (2005). Human factors in Air Force flight mishaps: Implications for change. Proceedings of the 27th Annual Interservice/Industry Training, Simulation, and Education Conference (paper no. 2260). Arlington, VA: National Training Systems Association.
- 5 ^ Schulz, CM; Endsley, MR; Kochs, EF; Gelb, AW; Wagner, KJ (Mar 2013). "Situation Awareness in Anesthesia - Concept and Research"⁶⁷ (PDF). *Anesthesiology*. 118 (3): 729–42. doi:10.1097/ALN.0b013e318280d40f. PMID 23291626.
- 6 ^ Blandford, A.; Wong, W. (2004). "Situational awareness in emergency medical dispatch"⁶⁸ (PDF). *International Journal of Human-Computer Studies*. 61 (4): 421–452. doi:10.1016/j.ijhcs.2003.12.012. Gorman, Jamie C.; Cooke, Blasch, E., Bosse, E., and Lambert, D.A., High-Level Information Fusion Management and Systems Design, Artech House, Norwood, MA, 2012.
- 29 ^ Boddu, Sanjay K., et al. (2012). "Increasing situational awareness using smartphones" SPIE Defense, Security, and Sensing: International Society for Optics and Photonics, 2012.
- 30 ^ Sanjay Kumar Boddu, Matt McCartney, Oliver Ceccopieri, et al., "A collaborative smartphone sensing platform for detecting and tracking hostile drones", Proceedings of SPIE Vol. 8742, 874211 (2013)
- 31 ^ Dostal, B.C. (2007). "Enhancing situational understanding through the employment of unmanned aerial vehicles"⁶⁹ (PDF). *Interim Brigade Combat Team Newsletter*. No. 1–18 (Army Transformation Taking Shape...). Retrieved 7 November 2007.
- 32 ^ Endsley, M.R. (2000). "Theoretical underpinnings of situation awareness: A critical review". In M.R. Endsley, D.J. Garland (eds.).
- 60 ^ Jones, D.G.; Endsley, M.R. (2000). *Examining the validity of real-time probes as a metric of situation awareness*⁷⁰ (PDF). *Proceedings of the 14th Triennial Congress of the International Ergonomics Association and the 44th Annual Meeting of the Human Factors and Ergonomics Society*. Santa Monica, CA: Human Factors and Ergonomics Society. Archived from the original (PDF) on 2007-09-28.
- 61 ^ a ^ b Strater, L.D.; Endsley, M.R.; Pleban, R.J., & Matthews, M.D. (2001). Measures of platoon leader situation awareness in virtual decision-making exercises (No. Research Report 1770). Alexandria, VA: Army Research Institute.
- 62 ^ Taylor, R.M. (1989). *Situational awareness rating technique (SART): The development of a tool for aircraft systems design*. Proceedings of the AGARD AMP Symposium on Situational Awareness in Aerospace Operations, CP478. Seullly-sur Seine: NATO AGARD.
- 63 ^ Best, Daniel M.; Bohn, Shawn; Love, Douglas; Wynne, Adam; Pike, William A. (2010). *Real-time visualization of network behaviors for situational awareness*. *Proceedings of the Seventh International Symposium on Visualization for Cyber Security - ViZSec '10*. pp. 79–90. doi:10.1145/1850795.1850859. ISBN 978145030131. S2CID 8520455.
- 67 ^ a ^ b Matheus, Mary; Halvorsen, Paul; Joshi, Anupam; Finin, Tim (2012). *A Collaborative Approach to Situational Awareness for CyberSecurity*. *Proceedings of the 8th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing*. doi:10.1109/cicn.2012.250794. ISBN 978-1-936968-36-7. S2CID 14135227.
- 68 ^ Sikos, Leslie; Stumpner, Markus; Mayr, Wolfgang; Howard, Catherine; Voigt, Shaun; Philip, Dean (2018). *Automated Reasoning over Provenance-Aware Communication Network Knowledge in Support of Cyber-Situational Awareness*⁷¹, Lecture

- Nancy J.; Winner, Jennifer L. (2006). "Measuring team situation awareness in decentralized command and control environments". *Ergonomics*, **49** (12–13): 1312–1325. doi:10.1080/00140130600612768. PMID 17008258. S2CID 10879737.
7. ^ Flin, R. & O'Connor, P. (2001). Applying crew resource management in offshore oil resource management. In E. Salas, C.A. Bowers, & E. Edens (Eds.), *Improving teamwork in organizations: Applications of resource management training* (pp. 217–233). Hillsdale, NJ: Erlbaum.
8. ^ Hartel, C.E.J., Smith, K., & Prince, C. (1991 April). Defining aircrew coordination: Searching mishaps for meaning. Paper presented at the 6th International Symposium on Aviation Psychology, Columbus, OH.
9. ^ Merket, D.C., Bergendy, M., & Cuevas-Mesa, H. (1997, March). Making sense out of teamwork errors in complex environments. Paper presented at the 18th Annual Industrial/Organizational/Organizational Behavior Graduate Student Conference, Roanoke, VA.
10. ^ Endsley, Michael Jones, Debra (2016-04-19). *Designing for Situation Awareness* (Second ed.). CRC Press. p. 13. ISBN 978-1-4200-6358-5.
11. ^ a b Lundberg, Jonas (16 February 2015). "Situation awareness systems, states and processes: a holistic framework". *Theoretical Issues in Ergonomics Science*. Informa UK Limited. **16** (5): 447–473. doi:10.1080/1464792x.2015.1008601. ISSN 1463-922X. S2CID 109500777.
12. ^ Sun Tzu *The Art of War Chapter X*. 地形
13. ^ Press, M. (1986). Situation awareness: Let's get serious about the blue-bird. Unpublished manuscript.
14. ^ Biferno, M.A. "Flight Crew Computer Interaction"; Douglas Aircraft Company, Internal Research and Development. Long Beach, CA.
15. ^ Biferno, M.A., "Mental Workload Measurement"; Douglas Aircraft Company, Internal Research and Development. Long Beach, CA.
16. ^ Dawson, M.E., Biferno, M.A. (1973). "Concurrent measurement of awareness and electrodermal classical conditioning". *Journal of Experimental Psychology*, **101**, 55–62.
17. ^ Biferno, M.A., Dawson, M.E. (1977). "The onset of contingency awareness and electrodermal classical conditioning: An analysis of temporal relationships during acquisition and extinction". *Psychophysiology*, **14** (2), 164–171. doi:10.1111/j.1469-8986.1977.tb03370.x. PMID 647068.
18. ^ Biferno, M.A. (1985). "Relationship between event-related potential components and ratings of workload and fatigue". NASA Ames, Moffett Field, CA. NASA contract report 177354.
19. ^ Biferno, M.A. & Stanley, D. L. (1983). The Touch-Sensitive Control/Display Unit: A promising Computer Interface. Technical Paper 831532. Aerospace Congress & Exposition, Long Beach, CA: Society of Automotive Engineers.
20. ^ Watts, B.D. (2004) [1996, as McNair Paper no. 52]. "Chapter 9 'Situation awareness' in air-to-air combat and friction". *Clauseswitzian Friction and Future War*. McNair Paper no. 68. Institute of National Strategic Studies, National Defense University.
21. ^ Spick, M. (1988). *The Ace Factor: Air Combat and the Role of Situational Awareness*. Annapolis, MD: Naval Institute Press.
22. ^ a b ^ Endsley 1995b.
23. ^ Gaba, D.M., Howard, S.K., Small, S.D. (1995). "Situation awareness in anaesthesia". *Human Factors*, **37** (1): 20–31.
- Situation awareness analysis and measurement. Mahwah, NJ: LEA.
33. ^ a b ^ Endsley & Jones 1997.
34. ^ Sarter, N.B., Woods, D.D. (1991). "Situation awareness: A critical but ill-defined phenomenon". *International Journal of Aviation Psychology*, **1**: 45–57. doi:10.1207/s15327108ijap0101_4.
35. ^ Glaser, R. (1989). Expertise and learning: How do we think about instructional processes now that we have discovered knowledge structures? In D. Klahr & K. Kotovsky (Eds.), *Complex information processing: The impact of Herbert A. Simon* (pp. 269–292). Hillsdale, NJ: Erlbaum.
36. ^ Kozlowski, S.W.J. (1998). Training and developing adaptive teams: Theory, principles, and research. In J.A. Cannon-Bowers, & E. Salas, (Eds.), *Making decisions under stress: Implications for individual and team training* (pp. 115–153). Washington, DC: American Psychological Association.
37. ^ Endsley, M.R. (1997). The role of situation awareness in naturalistic decision making. In Zsambok, C.E. & G. Klein (Eds.), *Naturalistic decision making* (pp. 269–283). Mahwah, NJ: LEA.
38. ^ Serfaty, D., MacMillan, J., Entin, E.E., & Entin, E.B. (1997). The decision-making expertise of battle commanders. In C.E. Zsambok & G. Klein (Eds.), *Naturalistic decision making* (pp. 233–246). Mahwah, NJ: LEA.
39. ^ Klein, Moon & Hoffman 2006.
40. ^ Klein, Moon & Hoffman 2006, p. 71.
41. ^ a b ^ Endsley, M.R. (2004). "Situation awareness: Progress and directions". In S. Banbury, S. Tremblay (eds.), *A cognitive approach to situation awareness: Theory and application*. Aldershot, UK: Ashgate Publishing. pp. 317–341.
42. ^ a b ^ McNauly, K., Davey, C., White, D., Stimson, M., Mescall, S.; Korb, K. (2018). "Inference in the wild: A framework for human situation assessment and a case study of air combat". *Cognitive Science*, **42** (7), 2181–2204. doi:10.1111/cogs.12636.
43. ^ a b ^ Sloman, S. (2005). *Causal models: How people think about things and their alternatives*. Oxford University Press. ISBN 9780195183115. Retrieved 2 May 2019.
44. ^ a b ^ Endsley 1995a.
45. ^ Endsley et al. 2000.
46. ^ Endsley 1995a, p. 65.
47. ^ Arthman, H. (2000). "Team situation assessment and information distribution". *Ergonomics*, **43** (8): 1111–1128. doi:10.1080/00140130050084905.
53. ^ a b ^ Endsley 1995b.
54. ^ a b ^ Endsley 1995b, p. 39; see also Endsley, M.R. (1989). Final
63. ^ Endsley, M.R. (1998). A comparative analysis of SAGAT and SART for evaluations of situation awareness. In *Proceedings of the Human Factors and Ergonomics Society 42nd Annual Meeting* (pp. 82–86). Santa Monica, CA: The Human Factors and Ergonomics Society.
64. ^ Endsley, M.R. (1990). Predictive utility of an objective measure of situation awareness. *Proceedings of the Human Factors Society 34th Annual Meeting* (pp. 41–45). Santa Monica, CA: Human Factors Society.
65. ^ Mattheis, M.D., Pleban, R.J., Endsley, M.R., & Stratton, L.G. (2000). Measures of infantry situation awareness for a virtual MCOUT environment. *Proceedings of the Human Performance, Situation Awareness and Automation: User-Centered Design for the New Millennium*. Savannah, GA: SA Technologies, Inc.
66. ^ Bolstad, C.A., Cuevas, H.M., Gonzalez, C., & Schneider, M. (2005). Modeling shared situation awareness. *Proceedings of the 41st Conference on Behavior Representation in Modeling and Simulation (BRIMS)*. Los Angeles, CA.
67. ^ Bolstad, C.A., Fohr, P., Franzke, M., Cuevas, H.M., Rosenstein, M., & Costello, A.M. (2007). Predicting situation awareness from team communications. *Proceedings of the 51st Annual Meeting of the Human Factors and Ergonomics Society*. Santa Monica, CA: HFES.
68. ^ Foltz, P.W., Bolstad, C.A., Cuevas, H.M., Franzke, M., Rosenstein, M., & Costello, A.M. (in press). Measuring situation awareness through automated communication analysis. To appear in M. Letsky, N. Warner, S.M. Flannery, & C. Smith (Eds.), *Macrorecognition in teams*. Aldershot, England: Ashgate.
69. ^ a e.g., French, H.T., Clark, E., Pomroy, D., Seymour, M., & Clarke, C.R. (2007). *Psycho-physiological Measures of Situation Awareness*. In M. Cook, J. Noyes & Y. Masakowski (eds.), *Decision Making in Complex Environments*. London: Ashgate. ISBN 0-7546-4950-4.
70. ^ a b ^ Wilson, G.F. (2000). Strategies for psychophysiological assessment of situation awareness. In M.R. Endsley & D.J. Garland, (Eds.), *Situation awareness analysis and measurement part II*. Mahwah, NJ: Lawrence Erlbaum Associates.
71. ^ a e.g., Harwood, K., Barnes, B., & Widens, C.D. (1988). Situation awareness: A conceptual and methodological framework. In F.E. McIntire (Ed.), *Proceedings of the 11th Biennial Psychology in the Department of Defense Symposium* (pp. 23–27). Colorado Springs, CO: U.S. Air Force Academy.
72. ^ Lock, Gareth (25 August 2021). "Why divers miss the obvious" www.youtube.com/DAN_SouthernAfrica. Archived from the original on 2021-11-14. Retrieved 28 August 2021.
73. ^ a b ^ Simmon, D.A. (1998). Boeing 757 CFIT Accident at Cali, Colombia, becomes focus of lessons learned. *Flight Safety Digest*, **17**, 1–31.
74. ^ Revista Aviador—Official Spanish Commercial Pilots Association magazine—July–August 2011, # 61, 38–39 pag.
75. ^ Revista de Aeronautica y Astronautica—Official SPAF magazine—May 2012 issue, 436–439 pag.
76. ^ Cognitive Systems Engineering Jens Rasmussen and others, *77. ^ First Aid, Protect Yourself*, American Red Cross – Accessed 01/Aug/13
78. ^ a b ^ First Aid, Understanding What Happened – Accessed 01/Aug/13
79. ^ a b Accident Report NTSB/RAR-16/02, PB2016-103218: Derailment of Amtrak Passenger Train 188, Philadelphia, Pennsylvania, May 2015 (PDF) (Report). National Transportation Safety Board.
- Notes in Computer Science, vol. 11062, Cham: Springer, pp. 152–143. doi:10.1007/978-3-319-99247-1_12. ISSN 978-3-319-99246-4
89. ^ a b c ^ Army scientists Improve human-agent teaming by making AI agents more transparent" [PDF](#). US Army Research Laboratory. Retrieved 2018-08-15.
90. ^ Boyce, Michael, Chen, Joyce, Selkowitz, Andrew, Lakhtani, Shan (May 2015). "Agent Transparency for an Autonomous Squad Member" [PDF](#). Retrieved 2018-07-28.
91. ^ a b c Chen, Jessie Y.C., Lakhtani, Shan G., Stovers, Kimberly, Selkowitz, Anthony R., Wright, Julia L., Barnes, Michael (2018-02-23). "Situation awareness-based agent transparency and human-autonomy teaming effectiveness" [PDF](#). *Theoretical Issues in Ergonomics Science*, **19** (3), 259–282. doi:10.1080/1463922x.2017.1315750. ISSN 1463-922X. S2CID 115436644.
92. ^ a b c ^ CrowdSA - Crowdsourced Situation Awareness for Crisis Management" [PDF](#). cis.jku.at. Retrieved 9 January 2017.
93. ^ a b ^ Situation Awareness and Relief System During Disaster Events [PDF](#). *International Journal of Research in Science & Engineering*. Retrieved 9 January 2017.
94. ^ a b ^ Crowdsourcing public safety: Building community resilience by enhancing citizen situation awareness capability" [PDF](#). RISE 2017. Northeastern University. Retrieved 9 January 2017.
95. ^ a b ^ Shepard, Steven (2014-07-06). *Telecommunications Crash Course, Third Edition* [PDF](#). McGraw Hill Professional. ISBN 9780077179115. Retrieved 9 January 2017.
96. ^ a b ^ Poblet, Marta, Garcia-Cuesta, Esteban, Casanovas, Pompeu (2014). *Crowdsourcing Tools for Disaster Management: A Review of Platforms and Methods* [PDF](#). *Lecture Notes in Computer Science* Vol. 8929, pp. 261–274. doi:10.1007/978-3-662-45960-7_19. ISBN 978-3-662-45959-1. ISSN 0302-9743. Retrieved 9 January 2017.
97. ^ a b ^ Chu, E.T.H., Chen, S.W., Li, J.W.S. (2012). *Crowdsourcing Information for Enhanced Disaster Situation Awareness and Emergency Preparedness and Response* [PDF](#). POFI, 23rd International CODATA Conference. Retrieved 9 January 2017.
98. ^ a b ^ Arkan, Hamid Reza, Dilyanat, Abolfazl, Pourkhaleh, Afef (2017). "MIST: Fog-based data analytics scheme with cost-efficient resource provisioning for IoT crowdsensing applications" *Journal of Network and Computer Applications*, **92**, 152–165. doi:10.1016/j.jnca.2017.01.012.
99. ^ a b ^ Basu, Moumita, Bandopadhyay, Somprakash, Ghosh, Sapthari (2016). "Post Disaster Situation Awareness and Decision Support Through Interactive Crowdsourcing" [PDF](#). *Procedia Engineering*, **159**, 167–173. doi:10.1016/j.proeng.2016.06.151.
100. ^ a b ^ Haddawy, Peter, Fromberger, Lutz, Kauppinen, Tomi, De Felice, Giorgia, Charkrabarti, Praj, Saengpao, Siravaratt, Kancharakitsakul, Phanumas (1 January 2015). *Situation Awareness in Crowdsourcing for Disease Surveillance in Crisis Situations* [PDF](#). *Proceedings of the Seventh International Conference on Information and Communication Technologies and Development*, pp. 38–31. ISBN 978-3-639-27378-9. ISBN 9781450331630. S2CID 3026308.
101. ^ a b ^ Alatturo, Tanja (8 May 2015). "Crowdsourcing as a Knowledge-Search Method in Digital Journalism" [PDF](#). *Digital Journalism*, **4** (2), 280–297. doi:10.1080/21670811.2015.1034807. ISSN 2167-0811. S2CID 156243124.
- Retrieved 6 January 2017.

- report: situation awareness in an advanced strategic mission (rvo NOR DOC 89-32). Hawthorne, CA: Northrop Corporation.
55. ^ Endsley & Jones 1997, p. 47.
56. ^ Endsley & Jones 2001, p. 48.
57. ^ a b Endsley & Jones 2001.
58. ^ Smith, K. T. (2013). *Building a human capability decision engine*.⁶⁰ Contemporary Ergonomics and Human Factors 2013: Proceedings of the international conference on Ergonomics & Human Factors 2013, pp. 395–402. ISBN 9780203744581.
59. ^ Graham, S.E. & Mattheis, M.D. (2002). Modeling and measuring situation awareness. In J.H. Hiller & R.L. Wampler (Eds.), *Workshop on assessing and measuring training performance effectiveness* (Tech. Rep. 1116) (pp. 14–24). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
60. ^ Holland, T. M. (16 October 2019). "ATAK improves situational awareness for California fire department".⁶¹ *Insights*. Samsung.
62. ^ "Chain Saw and Crosscut Saw Training Course".⁶² US Forest Service. Retrieved 1 August 2013.
63. ^ "Chapter 2, Page 7, Situational Awareness".⁶³ US Forest Service. Retrieved 1 August 2013.
64. ^ "Improving Situational Awareness".⁶⁴ Police Chief Magazine. Archived from the original on 2014-01-08. Retrieved 1 August 2013.
65. ^ Bellekens, Xavier; Hamilton, Andrew; Seam, Preetha; Nieradzinska, Kamila; Franssen, Quentin; Seam, Amar (2016). *Pervasive eHealth services a security and privacy risk awareness survey*.⁶⁵ (PDF). 2016 International Conference on Cyber Situational Awareness, Data Analytics and Assessment (CyberSA). pp. 1–4. doi:10.1109/CyberSA.2016.7503293. ISBN 978-1-5090-0703-5. S2CID 14502409.
66. ^ Altamurto, Tanja (1 October 2015). "Motivation Factors in Crowdsourced Journalism: Social Impact, Social Change, and Peer Learning".⁶⁶ Retrieved 6 January 2017.
67. ^ Sutter, John D. "Ushahidi: How to 'crowdmap' a disaster".⁶⁷ CNN. Retrieved 6 January 2017.
68. ^ "The Impact of Crowdsourcing on Organisational Practices: The Case of Crowdmapping".⁶⁸ ISBN 978-3-00-050284-2. Retrieved 6 January 2017.
69. ^ Wood, Mark (27 June 2016). *Crowdsourced counter-surveillance: Examining the subversion of random breath testing stations by social media facilitated crowdsourcing*. Rethinking Cybercrime 2016. UCLAN Cybercrime Research Unit.
70. ^ "Concepts to Know: Crowdmapping".⁷⁰ Kimi Quaintance. 4 September 2011. Retrieved 6 January 2017.
71. ^ "Chemical Hazards and Polisons Report".⁷¹ (PDF). Public Health England. Retrieved 6 January 2017.

Sources [edit]

- Banbury, S.; Tremblay, S. (2004). *A cognitive approach to situation awareness: Theory and application*. Aldershot, UK: Ashgate Publishing. pp. 317–341.
- Endsley, M.R. (1995a). "Measurement of situation awareness in dynamic systems". *Human Factors*. 37 (1): 65–80. doi:10.1518/001872095779049499. S2CID 207496393.
- Endsley, M.R. (1995b). "Toward a theory of situation awareness in dynamic systems". *Human Factors*. 37 (1): 32–64. doi:10.1518/001872095779049543. S2CID 83479393.
- Endsley, M.R.; Jones, W.M. (1997). *Situation awareness, information dominance, and information warfare* (No. AL/CF-TR-1997-0156). Wright-Patterson AFB, OH: United States Air Force Armstrong Laboratory.
- Endsley, M.R.; Jones, W.M. (2001). "A model of inter- and intrateam situation awareness: Implications for design, training and measurement". In M. McNeese, E. Salas; M. Endsley (eds.). *New trends in cooperative activities: Understanding system dynamics in complex environments*. Santa Monica, CA: Human Factors and Ergonomics Society.
- Flach, J.M. (1995). "Situation awareness: Proceed with caution". *Human Factors*. 37 (1): 149–157. doi:10.1518/001872095779049400. S2CID 10159068.
- Klein, G.; Moon, B.; Hoffman, R.R. (2006). "Making sense of sensemaking I: Alternative perspectives". *IEEE Intelligent Systems*. 21 (4): 70–73. doi:10.1109/mis.2006.75. S2CID 12538674.
- Smith, K.; Hancock, P.A. (1995). "Situation awareness is adaptive, externally directed consciousness". *Human Factors*. 37 (1): 137–148. doi:10.1518/001872095779049444. S2CID 45587115.

Further reading [edit]

- Adam, E.C. (1993). Fighter cockpits of the future. Proceedings of 12th IEEE/AIAA Digital Avionics Systems Conference (DASC), 318–323.
- Dominguez, C.; Vidulich, M.; Vogel, E. & McMillan, G. (1994). Situation awareness: Papers and annotated bibliography. Armstrong Laboratory, Human System Center, ref. AL/CF-TR-1994-0085.
- Endsley, M.R. (1988). Situation awareness global assessment technique (SAGAT). Proceedings of the National Aerospace and Electronics Conference (NAECON), 789–795. New York: IEEE. doi:10.1109/NAECON.1988.195097.
- Jeannot, E.; Kelly, C.; Thompson, D. (2003). *The development of situation awareness measures in ATM systems*.⁶⁶ (PDF). Brussels: Eurocontrol, archived from the original.⁶⁷ (PDF) on 2012-03-19.
- Moray, N. (2004). Où sont les neiges d'an tan? ("Where are the snows of yesteryear?"). In D.A. Vincenzi, M. Mouloua & P.A. Hancock (Eds.), *Human performance, situation awareness and automation: Current research and trends* (pp. 1–31). Mahwah: LEA.

External links [edit]

- FDSE's COP Page⁶⁸

V-T-E	Underwater diving	[show]
Categories:	Attention Cognition	

This page was last edited on 2 July 2022, at 12:09 (UTC).

Text is available under the Creative Commons Attribution-ShareAlike License 3.0, additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.

[Privacy policy](#) [About Wikipedia](#) [Disclaimers](#) [Contact Wikipedia](#) [Mobile view](#) [Developers](#) [Statistics](#) [Cookie statement](#)



Look up *situation awareness* in Wiktionary, the free dictionary.

Shop the ITS Store!



IMMINENT THREAT SOLUTIONS

SHOP TOPICS VIDEOS PODCASTS ABOUT MEMBERS ⋮

Aug 13, 2019
Mindset

SHARE f t g+

3 Effective Techniques to Train Your Situational Awareness and Recognize Change

By [ITS Guest Contributor](#)



I have a friend who stepped off the curb and was killed by a vehicle running a red light. He was 40 years old and his life was over in one second. I almost made the same mistake.

While in England, I checked for traffic and confidently began to step into the intersection, when my companion yanked me back. I'd looked left instead of right, the wrong direction in a country that drives on the left-hand side of the street. It was a near miss and my companion chided me: "That's why we call you Yanks."

SITUATIONAL AWARENESS

I have spent a fair amount of time over the past several years trying to define and refine my understanding of the term "Situational Awareness."

Most of the written material deals with very technical definitions, that for me hold little real world application. As I tried to make them fit my own experience with awareness, I realized that the academic approach was impractical.

So here's how I defined "situational awareness." It is: "paying attention to what is going on around you." How's that for practical? It's more than that, but the basic definition is the ability to scan the environment and sense danger, challenges and opportunities, while maintaining the ability to conduct normal activities. In other words, to pay attention to your surroundings while not appearing to be paying attention.

Understanding the Baseline

Awareness is a choice. One has to choose to pay attention. But once that choice is made, the part of the brain responsible for monitoring the senses, known as the Reticular Activating System (RAS) takes over. It switches filters on and off that will fulfill your subconscious desire to pay attention. By simply telling yourself to pay attention to certain things, the RAS will scan for and acknowledge those things when it encounters them.

I have found three main obstacles to developing awareness. To understand the obstacles with awareness, let's define the most basic tenant of awareness: BASELINE. The concept of baseline states that our environment has a baseline, a homeostatic state of what things look like, sound like and feel like when nothing much is going on.

In the woods, this is reflective of the noise and activity level of the area when nothing much is happening. The normal state. For example, in the late afternoon, things are normally pretty quiet. The baseline is pretty flat. As we move into evening, the baseline changes a bit. Night feeding animals are coming out, day feeders are going in.

The increase in noise and activity is still the norm. It is louder and yet still within the realm of normal. Suddenly a predator appears. All the prey animals react. Alarm calls go out and the noise level suddenly spikes. This is referred to as a concentric ring of disturbance because it radiates out from the source.

In the city, each neighborhood has its own baseline. In one area, people move at a certain pace, talk at a certain volume, stand at a certain socially acceptable distance from one another, gesture in a certain way. This combination of noise and activity constitutes that area's baseline. Depending on cultural or ethnic norms, it will be different in various neighborhoods.

Being able to develop awareness is dependent upon first knowing the baseline for the area you are in and recognizing any variations to the baseline. These changes in baseline are learned from observation. One must know the baseline. One must recognize disturbances to the baseline and one must recognize if those disturbances represent a specific threat or opportunity.

This requires knowledge of the environment, knowledge of terrain. It requires that one recognizes predator behavior. It requires one to see well beyond normal sight. For example, an aware person will notice things others may miss: a youth in a hoodie across the street whose movements mimic yours. Or a dumpster set in such a way that requires you to pass close to it. It can be threats or potential threats. You must constantly monitor and assess. Over time, this becomes almost a background activity, requiring little conscious thought.

The key to great situational awareness is the ability to monitor the baseline and recognize changes.

Three Obstacles in Situational Awareness

1. Not Monitoring the Baseline. If you are not monitoring the baseline, you will not recognize the presence of predators that cause a disturbance. Other events can cause concentric rings as well. Any unusual occurrence from a

car accident to a street fight can create a concentric ring. One of the keys to personal security is learning to look for and recognize these disturbances. Some disturbances are dangerous, some are just entertaining.

2. Normalcy Bias. Even though we may sense a concentric ring that could be alerting us of danger, many times we will ignore the alert due to the desire for it NOT to be a danger. We want things to be OK, so we don't accept that the stimulus we're receiving represents a threat. We have a bias towards the status quo. Nothing has ever happened when I do this, so nothing is likely to happen.

3. The third interrupter of awareness is what we define as a Focus Lock. This is some form of distraction that is so engaging, that it focuses all of our awareness on one thing and by default, blocks all the other stimuli in our environment. This is when someone is texting and walks into a fountain. The smart phone is the single most effective focus lock ever invented. It robs us of our awareness in times and places where it's needed most.

Three Effective Techniques to Stay Aware

1. Monitor the Baseline. At first, this will require conscious effort. But after a while, I find that I can monitor the baseline subconsciously.

2. Fight Normalcy Bias. This requires you to be paranoid for a while as you develop your ability. Look at every disturbance to the baseline as a potential threat. This will allow you to stop ignoring or discounting concentric rings and begin making assessments of the actual risk. But as you learn, people will think you are jumpy or paranoid. That is OK. It's a skill that will save your life.

3. Avoid using the obvious focus locks in transition areas. It is ok to text while you are sitting at your desk or laying in bed. But it's NOT ok to text as you walk from your office to the parking garage.

Any time you're drawn to a concentric ring event, do a quick assessment of that ring, then stop looking at it (the event) and scan the rest of your environment to see what you're missing.

Developing awareness is a skill. At first it will seem very awkward and self-conscious, but with practice, it will become seamless and subconscious. You will start to pick up on more and more subtle rings of disturbance and more complex stimuli. Eventually, people may think you are psychic as they notice how you seem to sense events before they unfold.

Editor-in-Chief's Note: Kevin Reeve is the founder of [onPoint Tactical](#), training professionals and select civilians in urban escape & evasion, urban survival, wilderness survival, tracking and scout skills. I've personally taken onPoint Tactical's Urban Escape & Evasion class and highly recommend it as a resource!

Did you get more than 14¢ of value today?



If so, we'd love to have you as a Crew Leader by joining our annual membership! Click the Learn More button below for details.

Thanks to the generosity of our supporting members and occasionally earning money from qualifying purchases as an Amazon Associate, (when you click our Amazon links) we've eliminated annoying ads and content.

At ITS, our goal is to foster a community dedicated to learning methods, ideas and knowledge that could save your life.

[LEARN MORE](#)

RELATED ARTICLES



December 3, 2019

[Where Would Jason Bourne Sit?](#)



July 27, 2015

[How to Maintain Your Situational Awareness and Avoid an Ambush](#)



November 25, 2013

[Don't Become a Knockout Game Victim: Increase Your Awareness and Mindset](#)



September 17, 2014

[Learn the Qualities and Characteristics of a Military Combat Tracker](#)

Discussion

ALSO ON ITS TACTICAL



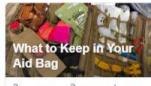
3 years ago · 3 comments

If you're planning a surveillance operation, consider ditching the ...



3 years ago · 5 comments

With the recent earthquakes in California and Florida being right in the heat of ...



2 years ago · 2 comments

<https://youtu.be/WEJ51Z...> An aid bag is a bit of a step up from a standard ...



2 years ago · 1 comment

I first wrote many c words in 2010 and started to clean the

[29 Comments](#) [ITS Tactical](#) [Disqus' Privacy Policy](#)

[Login](#)

[Favorite](#)

[Tweet](#) [Share](#)

Sort by Best



Join the discussion...

LOG IN WITH OR SIGN UP WITH DISQUS [?](#)

Name

 AkinolaOluorotimi - 6 years ago
@bryanblack

Hi Bryan loved reading this article. I came across it while looking for information on situational awareness. I got so many applications in My field which is Emergency Medicine. would like to reference this article in presentations I'm making.

1 ^ | v - Reply - Share >

 Marg Online - 6 years ago

Great insight into situational awareness. Every one should improve this skill set in order to make themselves act wise. Thanks for sharing this post!
<http://www.margonline.com/> | <http://www.margonline.com/>

1 ^ | v - Reply - Share >

 FrancesAnnRayburnRose - 7 years ago

Great article, thank you! If more people, especially young people, put down their cell phones! While people are engrossed in those things their situational awareness is off. How can the rest of us who have our heads on a swivel these days depend on others to raise the alarm?

1 ^ | v - Reply - Share >

 frank d - 7 years ago

Perhaps it would be advisable to suggest to women, men and children to limit or even stop cell phone conversations while walking on side walks, roads and any other unknown areas. Just my suggestion. BE AWARE.

1 ^ | v - Reply - Share >

 Sarita Joshi - 8 years ago

Hi I loved your article as it answers my question for maintaining situational awareness. I have been struggling to find exercises which I can use in class which would benefit my class.

I am a Trainer working with Marine officers, I take Human involvement in error. I have been ardently advocating the use of our five senses and it's importance in situational Awareness, also the need to avoid fixation.

Please do let me know if there are any activities or exercises which can be used in a class room setting for Mariners.

Sarita Joshi
India

1 ^ | v - Reply - Share >

 Dolores - 4 years ago

As a woman, reading this is kind of hilarious to me. All women have to walk around paying attention so they don't get kidnapped, raped or murdered. It's almost a normal part of life and I can't imagine being able to just walk down the street and not pay attention to things around me. Men really have it good.

^ | v - Reply - Share >

 DominikLapierre - 6 years ago

im wondering what the mean of the picture at the top.. dint feel anything from it that could be compared to the text, but still i cant stop thinking it here for a reason. anybody seen anything trough it?

^ | v - Reply - Share >

 NatashaGhost  DominikLapierre - 6 years ago
It's a "seemingly" quiet street in which you could let down your guard, not monitor baseline, be overly influenced by normacy bias and/or be focus locked.

[^](#) [v](#) [- Reply](#) [Share >](#)

 Dick, the Dad - 7 years ago
Good read Kevin. I just did a post on my website about teaching kids situational awareness and made sure to mention this. If anyone is interested in helping their kids learn situational awareness in a fun way:
<http://clickthedad.com/wwd>

it stands for What Would Batman Do :)
[^](#) [v](#) [- Reply](#) [Share >](#)

 KBN - 7 years ago
Great Stuff. Just to add to Joe Drew, the book "Left of Bang" has a lot of really good, in depth information about this topic. Definitely a recommended read.
[^](#) [v](#) [- Reply](#) [Share >](#)

 Logic Bob  KBN - 7 years ago
And it just came out in audio book format!
[^](#) [v](#) [- Reply](#) [Share >](#)

 Joe Dew - 7 years ago
This article works well with the book that I am reading at the moment, "the Gift of Fear" (that was recommended on this site). A lot of the same philosophies are echoed in greater detail in the book but it is nice to gain a different prospective.
[^](#) [v](#) [- Reply](#) [Share >](#)

 Marc D - 7 years ago
Excellent article. Situational awareness distilled to its practical essence.
[^](#) [v](#) [- Reply](#) [Share >](#)

 kh - 9 years ago
i would like to use your picture on my company's homepage. please inform me if this is possible. you can either leave your response on my email rod125@naver.com or comment below. thank you.
[^](#) [v](#) [- Reply](#) [Share >](#)

 naveedlatif23 - 9 years ago
Hi,
I want to contribute to your websit as a guest author.
I have wonderful topics in mind and some of them are mentioned below.
Top 10 Outdoor Adventure Places in the World
Recreational Fishing Techniques for the Beginners
Important Tools for a good Hunter
Hunting Tips
Please tell me can i write a great article for your website and send you for review?

Looking for your reply.

Regards
Onas
[^](#) [v](#) [- Reply](#) [Share >](#)



Uncle Doug - 9 years ago

Bryan,

Great article. We used to call it "tunnel vision". The enemy distracts you; locks your attention. Then gets you from the side. I've been following your growth at ITS closely, using more than several of your videos to build my bugout bag and emergency and defensive supplies and more. Your guests and members would do well to do likewise. Keep up the good work. Very proud of you both; and remember, Master Chief is watching. V/r

Uncle Doug

[^](#) | [v](#) · [Reply](#) · [Share](#) >



bryanblack → Uncle Doug - 9 years ago

Uncle Doug Thanks Master Chief, I really loved Kevin's article too and I can't recommend his training enough. I learned so much from an Urban Escape and Evasion course I attended a few years back. I appreciate your continued support and stay safe! ~ Bryan

[^](#) | [v](#) · [Reply](#) · [Share](#) >



RT - 9 years ago

Thanks for a great article. I reblogged to [myprovidentjourney.wordpress...](#). We all need to pay attention more!

[^](#) | [v](#) · [Reply](#) · [Share](#) >



gotobtru - 9 years ago

About monitoring the baseline:
Is there any other point to which you would wish to draw my attention?
To the curious incident of the dog in the night-time.
The dog did nothing in the night-time.
That was the curious incident.

[^](#) | [v](#) · [Reply](#) · [Share](#) >



Prepper Website - 9 years ago

Great article. I would love to read an article with some scenarios and how it all plays out. The dumpster scene, etc... is helpful in starting to form mental images.

I've posted the article on PW.

Peace,

Todd

[^](#) | [v](#) · [Reply](#) · [Share](#) >



bryanblack → Prepper Website - 9 years ago

@Prepper Website Thanks Todd, glad you enjoyed the article! I'll definitely keep your suggestion in mind for a future article. I appreciate your support.

[^](#) | [v](#) · [Reply](#) · [Share](#) >



DVC Prepper - 9 years ago

Good article but I find myself task fixated with correcting the typos.:)

"He have a bias towards the status quo." "At first it will seem very awkward and self-conscious, but with practice, it will become seamless" "the part of the brain responsible for monitoring the senses"

[^](#) | [v](#) · [Reply](#) · [Share](#) >



bryanblack → DVC Prepper - 9 years ago

DVC Prepper Thanks for the catch, it seems no matter how many times you proof read, there's always something that gets missed.

[^](#) | [v](#) · [Reply](#) · [Share](#) >



Aussiechippe → bryanblack - 9 years ago

bryanblackDVC Prepper

Preparedness is a continuous journey, not a destination.

Final reading is a great opportunity to practice at least one aspect of your situational Awareness! It's about reading what's ACTUALLY on the page, rather than what you believe you wrote. How many vehicles drove past while you were proof-reading the page, etc. etc. Great short article, especially the point about Normalcy Bias. I have to give a talk on SA soon and I'm going to make sure that concept is part of it. It's a good way to talk about complacency because it's a slightly different take on the idea.

[^](#) [v](#) - Reply - Share >



yachtsecurity · 9 years ago

Thanks for the article. I have re-posted a link to it on my blog.

Don

[^](#) [v](#) - Reply - Share >



bryanblack ➔ yachtsecurity · 9 years ago

yachtsecurity Thanks Don

[^](#) [v](#) - Reply - Share >



redraven88 · 9 years ago

Very good advise. My girlfriend and I have been practicing situational awareness for awhile now and have both noticed things that others haven't and avoided some possible threats as well. This does become second nature and becomes part of your daily routine almost without you realizing it. We are smart/safe now and te many

[^](#) [v](#) - Reply - Share >



bryanblack ➔ redraven88 · 9 years ago

redraven88 Thanks for your comments and thoughts brother, glad to know these articles are making a positive impact on you and your girlfriend. Appreciate your continued support!

[^](#) [v](#) - Reply - Share >



YesitisThatakenagain · 6 years ago

YesitisThatakenagain · 6 years ago

An interesting article, but most of us are not geared up about fighting, but instead want to live more in the moment. Hints like this would be more beneficial.

[^](#) [v](#) 1 - Reply - Share >



Subscribe



Add Disqus to your site



Do Not Sell My Data

DISQUS



Do you have what you need to prevail?

Shop the ITS Store for exclusive merchandise, equipment and hard to find tactical gear.

[SHOP NOW](#)

Imminent Threat Solutions

6104 W Pioneer Pkwy Ste 212
Arlington, TX 76013

Pages

[Shop Videos](#) [About Us Terms of Use](#)

Membership

Learn more about joining our Community as a Crew Leader.

Connect With Us



support@itsactical.com

DUNS#: 967358958

CAGE CODE: 6DCH4

[Podcasts](#) [Privacy](#)

[Books](#) [Contact Us](#)

[Careers](#) [Muster](#)

[Forum](#)

[Become A Member](#)

[Member Login](#)



Proudly managed in
the great state of Texas

©2009-2022 ITS Tactical // Imminent Threat Solutions. All Rights Reserved.



Coolfire Blog

What Is Situational Awareness?



September 7, 2018

4 minutes

[Public Safety](#) | [Situational Awareness](#)

Share:

Situational awareness plays a crucial role across a variety of industries, from military to public safety and transportation — but what exactly is it?

Awareness of your surroundings

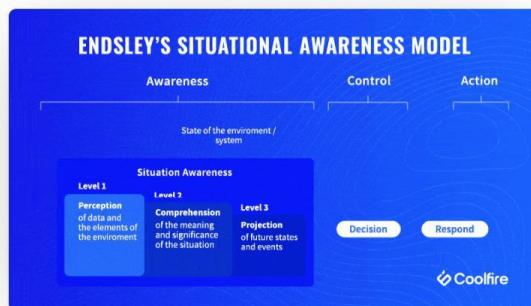
We've all heard the phrase "Be aware of your surroundings." Typically, this saying is used in relation to personal safety. For example, if you're walking alone at night, you should be cognizant of what's going on around you and be prepared to react if you perceive a threat. If you're driving a car, you should be aware of other drivers and try to anticipate their actions, such as someone slamming on their brakes or swerving into your lane.

Also called "situational awareness," this concept isn't just relevant to personal safety. It also plays a crucial role in the effectiveness and efficiency of businesses across a variety of industries, from military and government to public safety and transportation. Understanding how actions and events will impact the present and future state of affairs, whether that includes people, places, time, goals, or all of the above, is essential for on-the-spot decision-making. And whether you're in a combat zone or on a city street, immediate and informed action can critically affect the outcome of any situation.

What is situational awareness?

At a high level, situational awareness involves knowing what is going on around you at any given time. Achieving situational awareness relies on your ability to see, understand and analyze the world around you in the context of what you are trying to do.

In the late 1980s, psychologist [Mica Endsley](#) developed a model of situational awareness with three primary components: the perception of the elements in an environment within a volume of time and space, the comprehension of their meaning, and the projection of their status in the near future after some variable has changed. To put it simply, situational awareness involves picking up cues from the environment, putting those cues together to understand what is going on, and using that understanding to predict what may happen next.



While the term itself is relatively new, the concept of situational awareness has roots in the military, where it has historically [been linked to effective decision-making](#) in the tactical environment. Surviving in combat is often a matter of observing the enemy's current moves, predicting what he will do next, and reacting before he is able to do it.

Today, situational awareness is a necessity in many different industries that require effective, real-time decision-making in complex, high-risk environments, from

military and government and to public safety and transportation.

Why is situational awareness important?

A well-developed situational awareness provides business leaders with insight into what has happened, what is currently happening, and what might happen next. More importantly, this knowledge can give workers at the edge of operations the information they need to do their jobs more effectively. Situational awareness also affords a common operating picture, which benefits all types of businesses.

Consider, for example, **utility service providers** such as electric, gas and communications companies. Restoration efforts are daunting and can involve marshaling emergency responders, managing external crews and contractors, and interfacing with desperate customers. To quickly and safely restore service, managers need real-time visibility into locations and dispositions of work crews, assets and other resources. They need to be able to efficiently and confidently deploy crews, provide accurate estimated time of recoveries (ETRs), and assure safety.

Transportation and logistics is another example of an industry in which situational awareness is important. These companies depend on consistent and reliable delivery of product to customers. Lack of operational visibility into driver schedules, truck maintenance, and compliance reporting make it a challenge to ensure all deliveries are on time and in full. Any breakdown can halt revenue and torpedo customer satisfaction, sometimes for the long term.



Factors influencing situational awareness

Today, few businesses have trouble with the "perception" component of Endsley's situational awareness model; it's comprehension and anticipation that are most difficult to master. Data is more readily available than ever before, but it often comes from disparate sources and in various formats. If input systems and data are not connected, it can be difficult to decipher the big picture. Having a single, common view of your real-time operations makes all the difference.

Inefficient workflows and data silos also make it difficult to deliver the right information to the right user at the right time, inhibiting effective decision-making. Achieving true situational awareness means being able to filter through the noise and immediately deliver the most important data to users. Real-time access to relevant information encourages smarter, in-the-moment decisions and context-sensitive action.





How to achieve situational awareness

Most businesses already have the information they need to achieve situational awareness. The solution doesn't lie in identifying missing pieces and adding new sources of data. The key is leveraging your existing assets (personnel, locations, inventory, security systems, sensors, etc.) and aggregating the data you already have to create a common operational picture.



But true situational awareness doesn't occur until every employee is empowered with the information they need. For this reason, it's also necessary to provide your front-line personnel with a personalized view of this common operational picture, tailored to each person's unique role, responsibilities, and location.

Take, for example, a car rental company. In this type of business, customer service representatives, mechanics, car washers, return agents, and others own specific actions that make up a customer's overall rental experience. By integrating and aggregating existing operational investments, legacy systems, and processes into a custom dashboard that front-line employees can access at any time, team members are empowered with the information they need to provide customers with the highest-quality experience.

Conclusion

The need for swift, precise action is a pain point across all industries and at all organizational levels. Companies with an adept sense of situational awareness have a clearer picture and better control of their systems, personnel, and outcomes. When everyone works from the same playbook, so to speak, a company can minimize system gaps and improve operational efficiency. They may even discover new service opportunities for their customers to enjoy.

[← Prev: Public Safety: A Connected & Proactive Approach \[Video\]](#)

[Next: What's The Difference: Fog Vs Edge Computing? →](#)

 Share:

 Get control of your ops chaos with insights, tips, and best practices delivered weekly.

You May Also Like...



4 Ways to Fix Your Site Inspection Operations

Aug 19, 2022

Digital transformation is no longer a goal but a reality as companies have rapidly doubled down to stay competitive....



How to Digitize Your Telecom Site Capture Process [infographic]

May 4, 2022

The term 'Digital Transformation' is often overused and abused - to a point where we've started to ignore it. With an...



Coolfire's New Mobile App for Frontline Team Collaboration Launch

Oct 14, 2021

Let's break down the release of our new mobile application designed for frontline teams. What's new? Our latest...



Core product
Coolfire Core
Enterprise

Resources
Coolfire Blog
Partner Program

Who we are
About Coolfire
Contact Coolfire

We help people, teams, and businesses get their work done better, faster, and easier.

© Coolfire. 2022 All Rights Reserved

Features

- Pricing
- Industries
- Integrations
- Sign In to Core
- [Try Core Free!](#)
- [Schedule a Demo](#)

Resources

- [Case Studies](#)
- [Support](#)
- [Privacy & Terms](#)

Careers

- [Leadership Team](#)
- [Press & In The News](#)





Log In | Register

PORTALS

BROWSERS

THEMES

TUTORIALS

COURSES

PUBLICATIONS

Home » Portals » Human Performance » Human Behaviour

Situational Awareness

Description

Put simply, situational awareness (SA) means appreciating all you need to know about what is going on when the full scope of your task - flying, controlling or maintaining an aircraft - is taken into account. More specifically and in the context of complex operational environments, SA is concerned with the person's knowledge of particular task-related events and phenomena. For example, for a fighter pilot, SA means knowing about the threats and intentions of enemy forces as well as the status of his/her own aircraft. For an air traffic controller, SA means (at least partly) knowing about current aircraft positions and flight plans and predicting future states so as to detect possible conflicts. Therefore, in operational terms, SA means having an understanding of the current state and dynamics of a system and being able to anticipate future change and developments.

A general definition of SA is that it is the perception of the elements in the environment within a volume of time and space, the comprehension of their meaning and the projection of their status in the near future[1]

This basic definition has been extended by Dominguez et al. (1994)[2], who state that SA needs to include the following four specific elements:

1. extracting information from the environment;
2. integrating this information with relevant internal knowledge to create a mental picture of the current situation;
3. using this picture to direct further perceptual exploration in a continual perceptual cycle; and
4. anticipating future events.

Taking these four elements into account, SA is defined as the continuous extraction of environmental information, the integration of this information with previous knowledge to form a coherent mental picture, and the use of that picture in directing further perception and anticipating future events.

Significance

For a pilot, situational awareness means having a mental picture of the existing inter-relationship of location, flight conditions, configuration and energy state of your aircraft as well as any other factors that could be about to affect

Article Information

Category: Human Behaviour

Content source: SKYbrary



Content control: SKYbrary



FEEDBACK

We use cookies on this site to enhance your user experience.
By clicking the Accept button, you agree to us doing so. [No, give me more info](#)

[OK, I AGREE](#) [NO, THANKS](#)

head winds;

For a controller, situational awareness means acquiring and maintaining a mental picture of the traffic situation being managed and maintaining an appreciation of the potential for unexpected progressions or changes in this

scenario.

Defences

Situational awareness is so important that much of the working environment of both the pilot and the ATCO is designed and used to help maintain it.

- For the ATCO, this includes communication, with aircraft (voice and data link) and with other controllers; and radar, together with associated safety nets.
- For the pilot, this includes communication with the controller; monitoring communication between controllers and other aircraft; visual look-out; navigation (including use of maps and charts); and aircraft safety nets, including TAWS, ACAS and GPWS.

Typical Scenarios

- A pilot is cleared for an approach at night to an airport with which they are not familiar, but decides to fly by visual reference instead of following the vertical profile of the assigned instrument procedure because they can see the runway in the distance; CFIT results (e.g. 576, Peasmash East Sussex UK, 2012).
- The pilot is unaware of the existence of an airspace reservation and enters it without clearance resulting in Loss of Separation from another aircraft (e.g. A772 / B732, vicinity Queenstown New Zealand, 1999, B738 / C172, en route, near Falsterbo Sweden, 2014).
- The pilot copies a clearance incorrectly but fails to read it back; the read-back omission is overlooked by the ATCO and the aircraft climbs to a level to which it has not been cleared creating a level bust (e.g. C525 / B773, vicinity London City UK, 2009).
- The pilot focuses on a certain aspect of the flight and ignores others thus allowing the development of a hazardous situation (e.g. B738, Rostov-on-Don Russia, 2016)
- The ATCO forgets the presence of an aircraft on approach and clears another aircraft to enter the active runway in its path resulting in a Runway Incursion (e.g. B738 / B744, Los Angeles USA, 2004, B738/B734, Johannesburg South Africa, 2010).
- The ATCO issues a clearance to an aircraft flying in IMC which results in it entering a cumulonimbus cloud, where severe icing and turbulence are encountered.
- The ATCO clears an aircraft to a level where it will be in conflict with a second locally-based aircraft; the aircraft is unaware of the error because communications with the locally-based aircraft are being conducted in the local language whereas other aircraft communications are being carried out in English (e.g. CLEX/F2TH, vicinity Ibiza Spain, 2012).

Contributory Factors

- Interruptions and distractions;
- Use of the local language on a frequency used by pilots who are not familiar with it;
- Pilot or ATCO workload;
- Poor radio discipline,

Solutions

- Strengthening the defences and reducing the impact of the contributory factors listed above.

Related Articles

- Loss of Separation
- Airspace Infringement

Related OGHFA Material

- Situational Awareness (OGHFA BN)
- Situational Awareness Visual
- Situational Awareness Quick Reference and Reminder

Further Reading

EUROCONTROL:

- The Development of Situation Awareness Measures in ATM Systems

Flight Safety Foundation ALAR Toolkit:

- ALAR Briefing Note 5.1 - Approach Hazards Overview
- ALAR Briefing Note 5.2 - Terrain
- ALAR Briefing Note 5.3 - Visual Illusions
- ALAR Briefing Note 5.4 - Wind Shear

References

1. Endsley, M. R. (1998). A comparative analysis of SAGAT and SART for evaluations of situation awareness. In Proceedings of the Human Factors and Ergonomics Society 42nd Annual Meeting (pp. 82-86). Santa Monica, CA: The Human Factors and Ergonomics Society.
2. Dominguez, C., Vidulich, M., Vogel, E. & McMillan, G. (1994). Situation awareness: Papers and annotated bibliography. Armstrong Laboratory, Human System Center, ref. AL/CF-TR-1994-0085.

Categories: Human Behaviour, Controlled Flight Into Terrain, HF-AO, HF-AM

SKYBRARY PARTNERS:



SAFETY KNOWLEDGE CONTRIBUTED BY:



About SKYbrary

What is SKYbrary

Contact us

Message to the Editor

Join SKYbrary

If you wish to contribute or participate in the discussions about articles you are invited to [join SKYbrary](#) as a registered user

Copyright © SKYbrary Aviation Safety, 2021-2022. All rights reserved.

[Disclaimer](#) | [SKYbrary privacy policy](#) | [Licence agreement and Code of conduct](#) |



The American Heritage® Dictionary of the English Language

Search

sense (sĕns) (sĕnz)

Share: [Twitter](#)

n.

1. a. Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium.
b. A perception or feeling produced by a stimulus; sensation: *a sense of fatigue and hunger.*
2. **senses** The faculties of sensation as means of providing physical gratification and pleasure.
3. a. An intuitive or acquired perception or ability to estimate: *a sense of diplomatic timing.*
b. A capacity to appreciate or understand: *a keen sense of humor.*
c. A vague feeling or presentiments: *a sense of impending doom.*
d. Recognition or perception either through the senses or through the intellect; consciousness: *had no sense of shame.*
4. a. Natural understanding or intelligence, especially in practical matters: *The boy had sense and knew just what to do when he got lost.*
b. often **senses** The normal ability to think or reason soundly: *Have you taken leave of your senses?*
c. Something sound or reasonable: *There's no sense in waiting three hours.*
5. a. A meaning that is conveyed, as in speech or writing; signification: *The sense of his criticism is that the proposal has certain risks.*
b. One of the meanings of a word or phrase: *The word set has many senses.*
6. a. Judgment; consensus: *sounding out the sense of the electorate on capital punishment.*
b. Intellectual interpretation, as of the significance of an event or the conclusions reached by it: *After I came away from the meeting with the sense that we had resolved all outstanding issues.*

adj.

1. To become aware of perceive; organisms able to sense their surroundings.
2. To grasp; understand: *sensed that the financial situation would improve.*
3. To detect automatically: *sense radioactivity.*

tr.v. **sensed, sens·ing, sens·es**

1. To become aware of perceive; organisms able to sense their surroundings.

2. To grasp; understand: *sensed that the financial situation would improve.*

3. To detect automatically: *sense radioactivity.*

[Middle English, meaning, from Old French *sens*, from Latin *sensus*, the faculty of perceiving, from past participle of *sentire*, to feel; see **SENT-** in the Appendix of Indo-European roots.]

The American Heritage® Dictionary of the English Language, Fifth Edition copyright ©2022 by HarperCollins Publishers. All rights reserved.

Indo-European & Semitic Roots Appendices

Thousands of entries in the dictionary include etymologies that trace their origins back to

HOW TO USE THE DICTIONARY

To look up an entry in *The American Heritage Dictionary of the English Language*, type the word in the search window above. For best results, after typing in the word, click on the "Search" button instead of using the "enter" key.

Some compound words (like *bus rapid transit*, *dog whistle*, or *identity theft*) don't appear on the drop-down list when you type them in the search window. For best results with compound words, place a quotation mark before the compound word in the search window.

GUIDE TO THE DICTIONARY

THE USAGE PANEL

The Usage Panel is a group of nearly 200 prominent scholars, creative writers, journalists, diplomats, and others in occupations requiring mastery of language. Annual surveys have gauged the acceptability of particular usages and grammatical constructions.

THE PANELISTS

AMERICAN HERITAGE DICTIONARY APP

The new American Heritage Dictionary app is now available for iOS and Android.

THE AMERICAN HERITAGE DICTIONARY BLOG

The articles in our blog examine new words, revised definitions, interesting images from the fifth edition, discussions of usage, and more.

THE 100 WORDS*

See word lists from the best-selling 100 Words Series!

FIND OUT MORE! *

INTERESTED IN DICTIONARIES?

Check out the Dictionary Society of North America at <http://www.dictionarysociety.com>

reconstructed proto-languages. You can obtain more information about these terms in our online appendices.

Indo-European Roots

Semitic Roots

The Indo-European appendix covers nearly half of the Indo-European roots that have left their mark on English words. A more complete treatment of Indo-European roots and the English words derived from them is available in our [Dictionary of Indo-European Roots](#).

American Heritage Dictionary Products



CONTACT US

Customer Service
Make Me An Author
Ebooks Help with Glose Reader

ABOUT US

Company Profile
Leadership Team
Corporate Social Responsibility
HarperCollins Careers
HarperCollins Imprints
HarperGreen
Social Media Directory
Accessibility

FOR READERS

Browse Reading Guides



Newspaper

FOR AUTHORS

Submit a Manuscript
Report Piracy
Agent Portal

MEDIA

Publicity Contacts
Press Room

SERVICES

HarperCollins Speakers Bureau
Library Services
Author Site Log
Deck & Exam Copies
Review Copies
OpenBook API
Marketing Partnerships

COVID-19 RESOURCES & PERMISSIONS GLOBAL DIVISIONS

Permissions for Adult Online Readings

Permissions for Kids Online Readings

SALES & RIGHTS

Booksellers & Retailer Ordering
HarperCollins Catalogs
Permissions
Subsidiary Rights
Media Rights and Content Development

CLOSE APP

iPhone

Android

HarperCollins US
HarperCollins Canada
HarperCollins Christian
HarperCollins Australia
HarperCollins India
HarperCollins UK

[Terms of Use](#) • [Terms of Sale](#) • [Your Ad Choices](#) • [Privacy Policy](#) • [California Privacy Policy](#)

Do Not Sell My Personal Information

Copyright 2022 HarperCollins Publishers All rights reserved.

*This website is best viewed in Chrome, Firefox, Microsoft Edge, or Safari. Some characters in pronunciations and etymologies cannot be displayed properly in Internet Explorer.

https://www.collinsdictionary.com/dictionary/english/sense at 09:35 18, 08/25/2022

LANGUAGE TRANSLATOR GAMES SCHOOLS BLOG RESOURCES

Collins sense

English French German Italian Spanish Portuguese Hindi Chinese Korean More ▾

English Dictionary Thesaurus Word Lists Grammar Conjugations Sentences Video Quiz



They found the body where?!
IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL
Terms apply

hulu

sense Video pronunciation English: sense American: sense sense Example sentences COBUILD Collocations

Definition of 'sense'

sense

Collins COBUILD

Word Frequency ●●●●●



(sens ①)

Word forms: plural, 3rd person singular present tense **senses** , present participle **sensing** , past tense, past participle **sensed**

1. COUNTABLE NOUN

Your **senses** are the physical abilities of sight, smell, hearing, touch, and taste.

She stared at him again, unable to believe the evidence of her senses.

...a keen sense of smell.

Synonyms: faculty, perception, sensation, feeling More Synonyms of **sense**

2. See also sixth sense

3. VERB

If you **sense** something, you become aware of it or you realize it, although it is not very obvious.

She probably sensed that I wasn't telling her the whole story.

He looks about him, sensing danger.

Prost had sensed what might happen.

Wordle Helper

Stuck at Wordle?
Try our helper to maintain your current streak!

Quick Word Challenge

Question: 1 - Score: 0 / 5
criminal activity or
economic activity?

Which version is correct?

Overall **criminal activity** is weak
and it is expected to remain weak in the near term.

Overall **economic activity** is weak
and it is expected to remain weak in the near term.

Cookies Settings Accept All Cookies



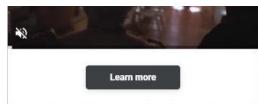
By clicking "Accept All Cookies", you agree to the storing of cookies on your device to enhance site navigation, analyze site usage, and assist in our marketing efforts.



sense Video pronunciation English: sense American: sense sense Example sentences COBUILD Collocations

Dashlesses daily other provider.
Cost: \$700





4. SINGULAR NOUN [NOUN that

If you have a **sense that** something is the case, you think that it is the case, although you may not have firm, clear evidence for this belief.

Suddenly you got this sense that people were drawing themselves away from each other.
There is no sense of urgency on either side.

Synonyms: feeling, impression, perception, awareness More Synonyms of **sense**

5. See also sense of occasion

6. SINGULAR NOUN

If you have a **sense of guilt** or relief, for example, you feel guilty or relieved.

When your child is struggling for life, you feel this overwhelming sense of guilt. [+ of

Lulled into a false sense of security, we eagerly awaited their return.

7. SINGULAR NOUN

If you have a **sense of** something such as duty or justice, you are aware of it and believe it is important.

My sense of justice was offended.

We must keep a sense of proportion about all this. [+/-]

She needs to regain a sense of her own worth. [+] of



8. SINGULAR NOUN [oft noun NOUN]

Someone who has a **sense of timing** or style has a natural ability with regard to timing or style. You can also say that someone has a bad **sense of timing** or style.

He has an impeccable sense of timing. [+ of]

Her dress sense is appalling.

...his astute business sense.



They found the body where?!

IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL

Terms apply.

hulu

Synonyms: understanding, awareness, appreciation, comprehension More Synonyms of **sense**

9. See also **sense of humour**

10. **UNCOUNTABLE NOUN**

Sense is the ability to make good judgments and to behave sensibly.

...when he was younger and had a bit more **sense**.

When that doesn't work they sometimes have the **sense** to seek help.

And I'll buzz over to talk some **sense** into old Ocker.

Synonyms: intelligence, reason, understanding, brains [informal] More Synonyms of **sense**



sense Video pronunciation English: sense American: sense sense Example sentences COBUILD Collocations



They found the body where?!

IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL

Terms apply.

hulu

11. See also **common sense**

12. **SINGULAR NOUN** [with neg. N in v-ing]

If you say that there is no **sense** or little **sense** in doing something, you mean that it is not a sensible thing to do because nothing useful would be gained by doing it.

There's no sense in pretending this doesn't happen.

There's little sense in trying to outspend a competitor with a much larger service factory.

Synonyms: point, good, use, reason More Synonyms of **sense**

your weekly offers have arrived



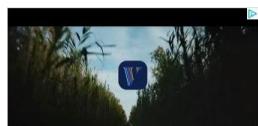
13. **COUNTABLE NOUN**

A **sense** of a word or expression is one of its possible meanings.

...a noun which has two **senses**.

Then she remembered that they had no mind in any real sense of that word.

Synonyms: meaning, definition, interpretation, significance More Synonyms of **sense**



The thing that's different about a *sense* is that it's... [Learn more](#)

sense Video pronunciation English: sense American: sense sense Example sentences COBUILD Collocations ▶

14. See [in a sense](#)

15. See [make sense](#)

16. See [make sense of sth](#)

17. See [make sense](#)

18. See [come to one's senses/bring sb to their senses](#)

19. See [have taken leave of one's senses](#)

20. See [talk sense](#)

21. See [have a sense that/get a sense that](#)

22. to see [sense](#)

COBUILD Advanced English Dictionary. Copyright © HarperCollins Publishers

Video: pronunciation of *sense*



your weekly offers have arrived



Video: pronunciation of *sense*



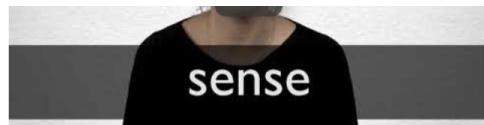
your weekly offers have arrived



They found the body where?!
IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL
Terms apply.

hulu



• You may also like •

English Quiz Confusables

Synonyms of 'sense'



see deals



They found the body where?!
IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL
Terms apply.

hulu

sense

Word Frequency ●●●●●

in British English

(sens ⓘ)

[English: sense](#) [American: sense](#) [sense](#) [Example sentences](#) [COBUILD Collocations](#) [Trends](#) [In other languages](#)

1. any of the faculties by which the mind receives information about the external world or about the state of the body. In addition to the five traditional faculties of sight, hearing, touch, taste, and smell, the term includes the means by which bodily position, temperature, pain, balance, etc, are perceived
2. such faculties collectively; the ability to perceive
3. a feeling perceived through one of the senses
a sense of warmth
4. a mental perception or awareness
a sense of happiness
5. moral discernment; understanding
a sense of right and wrong
6. (sometimes plural)
sound practical judgment or intelligence
he is a man without any sense
7. reason or purpose
what is the sense of going out in the rain?
8. substance or gist; meaning
what is the sense of this proverb?
9. specific meaning; definition

your weekly offers have arrived

see deals

safeway | suspiciously low-priced groceries

Terms apply.

Hulu

in what sense are you using the word?

10. an opinion or consensus
11. *mathematics*
one of two opposite directions measured on a directed line; the sign as contrasted with the magnitude of a vector
12. *logic, linguistics*
 - a. the import of an expression as contrasted with its referent. Thus *the morning star* and *the evening star* have the same reference, Venus, but different senses
 - b. the property of an expression by virtue of which its referent is determined

They found the body where?!
IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL
Terms apply.
hulu

◀ English: sense American: sense sense Example sentences COBUILD Collocations Trends In other langu ▶



your weekly offers have arrived



13. See bring someone to their senses
14. See come to one's senses
15. See make sense
16. See take leave of one's senses
- VERB (transitive)**
17. to perceive through one or more of the senses
18. to apprehend or detect without or in advance of the evidence of the senses
19. to understand
20. *computing*
 - a. to test or locate the position of (a part of computer hardware)
 - b. to read (data)

Collins English Dictionary. Copyright © HarperCollins Publishers

Word origin

C14: from Latin *sensus*, from *sentire* to feel

◀ English: sense American: sense sense Example sentences COBUILD Collocations Trends In other languages ▶

Word Frequency



your weekly

They found the body where?!
IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL
Terms apply.

hulu

in American English

(sens

NOUN

1. the ability of the nerves and the brain to receive and react to stimuli, as light, sound, impact, constriction, etc.; spec., any of five faculties of receiving impressions through specific bodily organs and the nerves associated with them (sight, touch, taste, smell, and hearing)
2. the senses considered as a total function of the bodily organism, as distinguished from intellect, movement, etc.
- 3.
- a. feeling, impression, or perception through the senses
a sense of warmth, pain, etc.
- b. a generalized feeling, awareness, or realization
a sense of longing
4. an ability to judge, discriminate, or estimate external conditions, sounds, etc.
a sense of direction, pitch, etc.
5. an ability to feel, appreciate, or understand some quality
a sense of humor, honor, etc.
- 6.
- a. the ability to think or reason soundly; normal intelligence and judgment, often as reflected in behavior
- b. soundness of judgment or reasoning
some sense in what he says
- c. something wise, sound, or reasonable
to talk sense
- d. [pl.]
normal ability to reason soundly
to come to one's senses

[English: sense](#) [American: sense](#) [sense](#) [Example sentences](#) [COBUILD Collocations](#) [Trends](#) [In other languages](#)



offers have arrived

see deals

LIDL suspiciously low-priced groceries

- a. meaning; esp., any of several meanings conveyed by or attributed to the same word or phrase
- b. essential signification; gist
to grasp the sense of a remark
8. the general opinion, sentiment, or attitude of a group
9. *Ancient Mathematics*
either of two contrary directions that may be specified, as clockwise or counterclockwise for the circumference of a circle, positive or negative for a line segment, etc.

VERB TRANSITIVE

Word forms: sensed or sensing

10. to be or become aware of
to sense another's hostility
11. to comprehend; understand

your weekly offers have arrived

They found the body where?!
IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL
Terms apply.

hulu

12. to detect automatically, as by sensors

Idioms:

in a sense
make sense

Webster's New World College Dictionary, 4th Edition. Copyright © 2010 by Houghton Mifflin Harcourt. All rights reserved.

Word origin

Fr *sens* < L *sensus* < *sentire*, to feel, perceive: see *send*¹

see deals

LIDL suspiciously low-priced groceries

sense

Word Frequency ● ● ● ● ●

in American English

(sens) (verb sensed, sensing)

NOUN



They found the body where?!
IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL
Terms apply.

hulu

- ◀ English: sense American: sense **sense** Example sentences COBUILD Collocations Trends In other languages
- 2. these faculties collectively
- 3. their operation or function; sensation
- 4. a feeling or perception produced through the organs of touch, taste, etc., or resulting from a particular condition of some part of the body
to have a sense of cold
- 5. a faculty or function of the mind analogous to sensation
the moral sense
- 6. any special capacity for perception, estimation, appreciation, etc.
a sense of humor
- 7. (*usually senses*)
clear and sound mental faculties; sanity
Have you taken leave of your senses?
- 8. a more or less vague perception or impression
a sense of security
- 9. a mental discernment, realization, or recognition; acuteness
a just sense of the worth of a thing
- 10. the recognition of something as incumbent or fitting
a sense of duty
- 11. sound practical intelligence
He has no sense
- 12. something that is sensible or reasonable
to talk sense
- 13. the meaning or gist of something

your weekly offers have arrived

see deals

LIDL suspiciously low-priced groceries

You missed the sense of his statement

14. the value or worth of something; merit
There's no sense in worrying about the past

They found the body where?!
IT'S A CRIME NOT TO WATCH
START YOUR FREE TRIAL
Terms apply.

hulu

16. an opinion or judgment formed or held, esp. by an assemblage or body of persons
the sense of a meeting
17. **Genetics**
a DNA sequence that is capable of coding for an amino acid (distinguished from *nonsense*)
18. **Math**
one of two opposite directions in which a vector may point
19. See come to one's senses
20. See in a sense
21. See make sense
- TRANSITIVE VERB**
22. to perceive (something) by the senses; become aware of
23. to grasp the meaning of; understand
24. (of certain mechanical devices)
to detect physical phenomena, as light, temperature, radioactivity, etc., mechanically, electrically, or photoelectrically
25. **Computing**
to read (punched holes, tape, data, etc.) mechanically, electrically, or photoelectrically

SYNOMYS

4. **SENSE**, **SENSATION** refer to consciousness of stimulus or of a perception as pleasant or unpleasant. A **SENSE** is an awareness or recognition of something; the stimulus may be subjective and the entire process may be mental or intellectual: *a sense of failure*. A **SENSATION** is an impression derived from an objective (external) stimulus through any of the sense organs: *a sensation of heat*. It is also a general, indefinite physical or emotional feeling: *a sensation of weariness*.

5. awareness, apprehension. 7. rationality. 9. estimation, appreciation. 13. signification, import, denotation, connotation, interpretation. See meaning. 16. feeling, sentiment. 22. discern, appreciate, recognize.

Most material © 2005, 1997, 1991 by Penguin Random House LLC. Modified entries © 2019 by Penguin Random House LLC and HarperCollins Publishers Ltd.

your weekly offers have arrived



see deals



Examples of 'sense' in a sentence

sense

▲ These examples have been automatically selected and may contain sensitive content that does not reflect the opinions or policies of

action, with *it> s; (v.) deriv. of the n.]*

your weekly offers have arrived



They found the body where?!
IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL
Terms apply.

hulu

Collins, or its parent company HarperCollins.
We welcome feedback: report an example sentence to the Collins team. Read more...

Your natural sense of fairness helps you disregard gossip.
THE SUN (2010)

They feel less sense of control because they actually have less control.
PAUL MARTIN MAKING HAPPY PEOPLE...

But in one sense it is a good risk for the underwriters.
TIMES, SUNDAY TIMES (2013)

The sense of something being beautifully done still has impact and credibility.
TIMES LITERARY SUPPLEMENT (2012)

Work and study plans get moving again and you sense they are leading to better times.
THE SUN (2008)

We suggest that borrowing may make sense for some firms but not for others.
CHARLES A. D'AMBROSIO & STE...

Losing your sense of smell is usually the result of your nose being blocked.
THE SUN (2009)

We found there a really great actor with a wonderful sense of timing.
THE SUN (2015)

LEAVE NO TRACE

WILD CRIME

Under the BANNER OF HEAVEN

They found the body where?!
IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL

hulu

◀ English: sense | American: sense | sense | **Example sentences** | COBUILD Collocations | Trends | In other languages ▶

Your sense of guilt takes that away from us.

KNOWLES, JANE KNOW YOUR OWN MIND...

COBUILD Collocations

sense

BETR

- collective sense
- great sense
- perfect sense
- real sense
- sense a change
- sense a need
- sense of shame
- sense of smell
- sense of superiority
- sense of taste

Show more...



see deals



your weekly offers have arrived



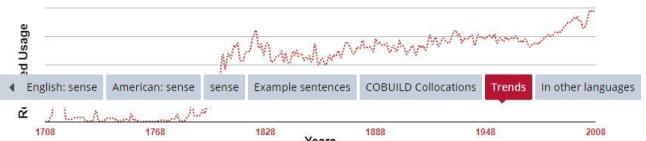
see deals



Trends of

sense

View usage for: All Years ▾



They found the body where?!

IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL

hulu

Terms apply.

In other languages

sense

British English: **sense**  /səns/ noun

Your **senses** are the physical abilities of sight, smell, hearing, touch, and taste.
...a keen **sense** of smell.

American English: **sense**  / sens/

Arabic: 

Brazilian Portuguese: **sentido** 

Chinese: 感觉 

Croatian: čulo 

Czech: smysl  vnímání

Danish: sans 

Dutch: zintuig  strekking

European Spanish: **sentido** 

Finnish: aisti 

French: **sens** 

German: Sinn 

Greek: ιδεήση 

Italian: senso 

Japanese: 感覚 

Korean: 감각 

Norwegian: fornuft 

Polish: zmysł 

European Portuguese: **sentido** 

Romanian: simt

Russian: въз чувство 

Latin American Spanish: **sentido** 

Swedish: sinne 

Thai: ประสาทสัมผัส

Turkish: duyu 

Ukrainian: почутия

Vietnamese: giác quan 

your weekly offers have arrived



Translate your text for free

Browse alphabetically

sense

English: **sense**  /səns/ noun

American: **sense**  / sens/

sense 

Example sentences 

COBUILD Collocations 

Trends 

In other languages 

dress sense 

your weekly





They found the body where?!

IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL
Terms apply.

hulu

sensationist

sense

sense a change

sense a need

sense an opportunity

All ENGLISH words that begin with 'S'

Source

Definition of **sense** from the Collins English Dictionary

Read about the team of authors behind Collins Dictionaries.

great sense

horse sense

make sense

[View more related words](#)

• New from Collins •

Quick Word Challenge

Question: 1 - Score: 0 / 5
attend court or reach court?

Drag the correct answer into the box.

The trial may take more than a year to

NEXT

[SEE FULL DEFINITION](#)
[SEE PREVIOUS WORDS](#)

● ● ● ● ●



Aug 25, 2022

Word of the day

crystal set

an early form of radio receiver having a crystal detector to demodulate the radio signals but no

[View definition](#) [View collocations](#) [View trends](#) [View other languages](#)



They found the body where?!

IT'S A CRIME NOT TO WATCH

START YOUR FREE TRIAL
Terms apply.

hulu

offers have arrived





This page in

English ▾

FAQS
Related Links ▾

Browse all official Collins
dictionaries

About Us Contact Us

© Collins 2022

Cookies Settings
Terms & Conditions
Privacy Policy
California Privacy Rights
Do Not Sell My Personal Information



The
AMERICAN HERITAGE® dictionary of the English Language

Search

as·sign ⓘ (ə-sin') Share: Tweet!

tr.v. **as-signed, as-sign·ing, as signs**

1. To select for a duty or office; appoint: *firefighters assigned to the city's industrial park*. See *Synonyms at appoint*.

2. To set apart for a particular purpose or place in a particular category; designate: *assigned the new species to an existing genus*. See *Synonyms at allocate*.

3. To give out as a task; allot: *assigned homework to the class*.

4. To scribe; attribute: *assigned blame for the loss to a lack of good defense*. See *Synonyms at attribute*.

5. To match or pair with: *assign a value to each of the variables*.

6. Law To transfer (property, rights, or interests) from one to another.

n.
Law
An assignee.

[Middle English *assigen*, from Old French *assigner*, from Latin *assignare*: *ad-*, ad- + *signdre*, to mark (from *signum*, sign; see **sekʷ**¹ in the Appendix of Indo-European roots.)]

as·sign·a·bil·i·ty *n.*
as·sign·a·ble *adj.*
as·sign·a·bly *adv.*
as·sign·er *n.*

The American Heritage® Dictionary of the English Language, Fifth Edition copyright © 2022 by HarperCollins Publishers. All rights reserved.

GUIDE TO THE DICTIONARY

To look up an entry in *The American Heritage Dictionary of the English Language*, type the word in the search window above. For best results, after typing in the word, click on the "Search" button instead of using the "enter" key.

Some compound words (like *bus rapid transit*, *dog whistle*, or *identity theft*) don't appear on the drop-down list when you type them in the search window. For best results with compound words, place a quotation mark before the compound word in the search window.

THE PANELISTS

The Usage Panel is a group of nearly 200 prominent scholars, creative writers, journalists, diplomats, and others in occupations requiring mastery of language. Annual surveys have gauged the acceptability of particular usages and grammatical constructions.

THE USAGE PANEL

The Usage Panel is a group of nearly 200 prominent scholars, creative writers, journalists, diplomats, and others in occupations requiring mastery of language. Annual surveys have gauged the acceptability of particular usages and grammatical constructions.

Indo-European & Semitic Roots Appendices

Thousands of entries in the dictionary include etymologies that trace their origins back to reconstructed proto-languages. You can obtain more information about these forms in our online appendices:

Indo-European Roots
Semitic Roots

The Indo-European appendix covers nearly half of the Indo-European roots that have left their mark on English words. A more complete treatment of Indo-European roots and the English words derived from them is available in our *Dictionary of Indo-European Roots*.

American Heritage Dictionary Products



**CONTACT US**

Customer Service
Make Me An Author
Ebooks Help with Glose Reader

ABOUT US

Company Profile
Leadership Team
Corporate Social Responsibility
HarperCollins Careers
HarperCollins Imprints
HarperGreen
Social Media Directory
Accessibility
Browse Reading Guides

 HarperCollins Publishers

News Corp.

FOR AUTHORS

Submit a Manuscript
Report Piracy
Agent Portal

MEDIA

Publicity Contacts
Press Room

SERVICES

HarperCollins Speakers Bureau
Library Services
Academic Services
Desk and Review Copies
OpenBook API
Marketing Partnerships

COVID-19 RESOURCES & PERMISSIONS

Permissions for Adult Online Readings

Permissions for Kids Online Readings

SALES & RIGHTS

Booksellers & Retailer Ordering
HarperCollins Catalogs
Permissions

Subsidiary Rights

Media Rights and Content Development

GLOSE APP

iPhone

Android

GLOBAL DIVISIONS

HarperCollins US
HarperCollins Canada
HarperCollins Christian
HarperCollins Australia
HarperCollins India
HarperCollins UK

[Terms of Use](#) • [Terms of Sale](#) • [Your Ad Choices](#) • [Privacy Policy](#) • [California Privacy Policy](#)
[Do Not Sell My Personal Information](#)
Copyright 2022 HarperCollins Publishers All rights reserved.

*This website is best viewed in Chrome, Firefox, Microsoft Edge, or Safari. Some characters in pronunciations and etymologies cannot be displayed properly in Internet Explorer.



Search Macmillan Dictionary



assign DEFINITIONS AND SYNONYMS ★★
VERB TRANSITIVE OFTEN PASSIVE US /ə sən/

WORD FORMS

DEFINITIONS 7

- 1 give someone a job to do
- 2 send someone to a place
- 3 put someone in a group
- 4 give money/equipment
- 5 give something a name/use etc.
- 6 decide a time for something
- 7 give someone ownership

① to give someone a job to do

be assigned to something *Two senior officers were assigned to the investigation.*
assign something to someone *It's his job to assign tasks to the various members of the team.*
be assigned something *Mountbatten was assigned responsibility for retaking the territory.*

Synonyms and related words

To employ someone

employ

appoint

take on

...

[Explore Thesaurus →](#)

What are red words? →

Share this entry f t



[Learn more](#)

QUZZES

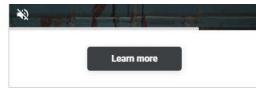
VOCABULARY QUIZ: TRENDING WORDS OF 2020



[Cookies Settings](#) [Accept All Cookies](#)



[Take the quiz now →](#)



② to send someone to a particular place, especially in order for them to work there

be assigned to something: *He was assigned to the company's branch in Cairo.*

Synonyms and related words

+

③ to put someone in a particular group

be assigned to something: *Tina has been assigned to the intermediate learners' group.*

Synonyms and related words

+

④ to give someone money or equipment so that they can use it for a particular purpose

be assigned something: *I was assigned a car for my personal use.*

Synonyms and related words

+

⑤ to decide that something has a particular name, use, or value

be assigned something: *The operation was assigned the code name "Rita."*

Synonyms and related words

+



⑥ to decide that something should take a particular amount of time

I have assigned four hours for recording the data.

Synonyms and related words

+

7 **LEGAL** to give someone the ownership of or rights to property
be assigned to someone *All rights shall be assigned to the publisher.*

Synonyms and related words +

American definition and synonyms of assign from the online English dictionary from Macmillan Education.
This is the American English definition of assign. View British English definition of assign.
Change your default dictionary to British English.
View the pronunciation for assign.

THE SAURUS

TRENDING WORDSSYNONYMS OF THE MONTH

lay the blame / responsibility (for something) on [NEW]

for ↗ 10.4%

NB ↗ 26.7%

take on ↗ 7.4%

put off ↘ -12.1%

gift



present surprise
token package
largesse treat

[Discover →](#) [Browse more →](#)

[Learn more](#)

[CONTACT](#)
[PRIVACY](#)
[COOKIES SETTINGS](#)
[COOKIES POLICY](#)
[TERMS AND CONDITIONS](#)
[FAQ](#)
[INDEX](#)

[ABOUT](#)
[AUTHORS](#)
[PARTNERS](#)
[OPTIONS](#)
[TOOLS](#)
 

FOLLOW US



Join Macmillan Dictionary on Twitter and Facebook for daily word facts, quizzes and language news.

© Macmillan Education Limited 2009–2022

! We will be closing the Lexico.com website and redirecting it to Dictionary.com starting Aug 26, 2022 [Learn More](#) X



Oxford English and Spanish Dictionary, Synonyms, and Spanish to English Translator

US DICTIONARY

forecast



Earn a Degree Online, on Your Budget. Terms Start Monthly.

LEARN MORE

PURDUE UNIVERSITY GLOBAL

Home > US English > forecast

Definition of forecast in English:

forecast

See synonyms for forecast

Translate forecast into Spanish



TRANSITIVE VERB (past participle verb **forecast**, past participle verb **forecasted**)

[WITH OBJECT]

Predict or estimate (a future event or trend)

'rain is forecast for eastern Ohio'

[+ More example sentences](#) [+ Synonyms](#)

Pronunciation ⓘ

forecast

/fôr'kast/ /fr. kæst/ ⓘ

NOUN

A prediction or estimate of future events, especially coming weather or a financial trend.

'Together the two firms can provide financial forecasts for virtually every listed company in the world'



Accounting: Upskilled

Becker

UNLIMITED OFFER
SAVE OVER 40%
INTEREST FREE FOR A YEAR
HBO MAX

Save Over 40% on HBO Max

Ad by HBO Max ⓘ

Sign Up Now

WORD OF THE DAY

jumbuck

/'dʒambək/

NOUN



Does English Have More Words Than Any Other Language?

Turner of Worcester and

NEXT

0/10

Feedback

TRENDING WORDS

Most popular in the world

1. cuddle
2. neddy
3. guerrilla art
4. nitto
5. liegeman

Are You Learning English? Here Are Our Top English Tips



[READ THESE ARTICLES](#)

[READ THESE ARTICLES](#)

[READ THESE ARTICLES](#)

Browse The English Dictionary: # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

[Find out More](#)

[About](#)

[Contact Us](#)

[Privacy Policy](#)

[Do Not Sell My Info](#)

[Dictionary & Synonyms](#)

[UK English Dictionary](#)

[US English Dictionary](#)

[Spanish Dictionary](#)

[English Synonyms](#)

[Translations](#)

[Spanish to English](#)

[English to Spanish](#)

[Explore](#)

[Articles](#)

© 2022 Lexico.com



The
AMERICAN HERITAGE® dictionary of the English Language

Search

fore·cast (fôr'kăst')
tr.v. **fore·cast** or **fore·cast·ed**, **fore·cast·ing**, **fore·casts**
1. To estimate or predict in advance, especially to predict (weather conditions) by analysis of meteorological data. See *Synonyms at predict*.
2. To serve as an advance indication; foreshadow: *price increases that forecast inflation.*
n.
A prediction, as of coming events or conditions: *The weather forecast stated that it would rain.*
[Middle English *forecoster*, to plan beforehand: *fore-* + *costen*, to throw, calculate, prepare; see *caster*.]

Share:  [Tweet!](#)

HOW TO USE THE DICTIONARY
To look up an entry in *The American Heritage Dictionary of the English Language*, type the word in the search window above. For best results, after typing in the word, click on the "Search" button instead of using the "enter" key. Some compound words (like *bus rapid transit*, *dog whistle*, or *identity theft*) don't appear on the drop-down list when you type them directly into the field. For better results with compound words, place a quotation mark before the compound word in the search window.

GUIDE TO THE DICTIONARY

THE USAGE PANEL
The Usage Panel is a group of nearly 200 prominent scholars, creative writers, journalists, diplomats, and others in occupations requiring mastery of language. Annual surveys have gauged the acceptability of particular usages and grammatical constructions.

THE PANELISTS

Indo-European & Semitic Roots Appendices
Thousands of entries in the dictionary include etymologies that trace their origins back to reconstructed proto-languages. You can obtain more information about these forms in our online appendices:
[Indo-European Roots](#)
[Semitic Roots](#)

The Indo-European appendix covers nearly half of the Indo-European roots that have left their mark on English words. A more complete treatment of Indo-European roots and the English words derived from them is available in our *Dictionary of Indo-European Roots*.

American Heritage Dictionary Products



CONTACT US

FOR AUTHORS

COVID-19 RESOURCES & PERMISSIONS

GLOBAL DIVISIONS

 **AMERICAN HERITAGE DICTIONARY APP**
The new American Heritage Dictionary app is now available for iOS and Android.

 **THE AMERICAN HERITAGE DICTIONARY BLOG**
The articles in our blog examine new words, revised definitions, interesting images from the fifth edition, discussions of usage, and more.

THE 100 WORDS*
See word lists from the best-selling 100 Words Series!
[FIND OUT MORE](#)

 **INTERESTED IN DICTIONARIES?**
Check out the Dictionary Society of North America at <http://www.dictionarysociety.com>

Customer Service
Make Me An Author
Ebooks Help with Gloss Reader

ABOUT US

Company Profile
Leadership Team
Corporate Social Responsibility
HarperCollins Careers
HarperCollins Imprints
HarperGreen
Social Media Directory
Accessibility
FOR READERS
Browse Reading Guides

Report Piracy
Agent Portal

MEDIA

Publicity Contacts
Press Room
SERVICES
HarperCollins Speakers Bureau
Library Services
Academic Services
Desk & Exam Copies
Review Copies
OpenBook API
Marketing Partnerships

Permissions for Kids Online Readings

SALES & RIGHTS

Booksellers & Retailer Ordering
HarperCollins Catalogs
Permissions
Subsidiary Rights
Media Rights and Content Development

CLOSE APP

iPhone
Android

HarperCollins Canada
HarperCollins Britain
HarperCollins Australia
HarperCollins India
HarperCollins UK



Newspaper

[Terms of Use](#) • [Terms of Sale](#) • [Your Ad Choices](#) • [Privacy Policy](#) • [California Privacy Policy](#)

[Do Not Sell My Personal Information](#)

Copyright 2022 HarperCollins Publishers. All rights reserved.

*This website is best viewed in Chrome, Firefox, Microsoft Edge, or Safari. Some characters in pronunciations and etymologies cannot be displayed properly in Internet Explorer.



We will be closing the Lexico.com website and redirecting it to Dictionary.com starting Aug 26, 2022

[Learn More](#)Powered by OXFORD
LEXICO

Oxford English and Spanish Dictionary, Synonyms, and Spanish to English Translator

US DICTIONARY

engage

Keyboard



Home > US English > engage

Main definitions of **engage** in English: [engage¹](#) [engage²](#)

engage¹

See synonyms for engage

Translate engage into Spanish

VERB

1 *[with object]* Occupy, attract, or involve (someone's interest or attention)
'he plowed on, trying to outline his plans and engage Sutton's attention'
[+ More example sentences](#) [+ Synonyms](#)

1.1 *(engage someone in)* Cause someone to become involved in (a conversation or discussion)
'they attempted to engage Anthony in conversation'
[+ More example sentences](#)

2 *(engage in) [no object]* Participate or become involved in.
'organizations engage in a variety of activities'
[+ More example sentences](#) [+ Synonyms](#)

3.1 *(engage with)* Establish a meaningful contact or connection with



Sponsored by [Bund MD](#)

4 *(with reference to a part of a machine or engine) move into position so as to come into*
'he had engaged a small sailboat'
[+ More example sentences](#) [+ Synonyms](#)



Nike Air Zoom Pegasus 50

Nike AD

WORD OF THE DAY

otherwhere
/ ʌðəwɛə /
ADVERB



Does English Have More Words Than Any Other Language?

Helping the Deafuel 0/10

Feedback

operation.
(no object) *'the clutch will not engage'*
[+ More example sentences](#) [+ Synonyms](#)

5 **[with object]** (of fencers or swordsmen) bring (weapons) together preparatory to fighting.
'Engage your brain before you engage your weapon.'
[+ More example sentences](#) [+ Synonyms](#)

5.1 Enter into conflict or combat with (an enemy)
'tank and infantry units engaged the enemy'
[+ More example sentences](#) [+ Synonyms](#)

Pronunciation ⓘ

engage

/ɪn'geɪj/ /ɪn'geɪdʒ/ /ən'gæj/ /ən'geɪdʒ/ /ɪn'geɪvəl/

Origin

Late Middle English (formerly also as *ingage*): from French *engager*, ultimately from the base of *gage*. The word originally meant 'to pawn or pledge something', later 'pledge oneself (to do something)', hence 'enter into a contract' (mid 16th century), 'involve oneself in an activity', 'enter into combat' (mid 17th century), giving rise to the notion 'involve someone or something else'.

Main definitions of **engagé** in English: [engage¹](#) [engage²](#)



engage²

See synonyms for *engage*

Translate *engage* into Spanish

ADJECTIVE

(of a writer, artist, or their works) morally committed to a particular aim or cause.
'he was determined that his writing and thinking should be *engage*'

[+ More example sentences](#) [+ Synonyms](#)

Pronunciation ⓘ

engagé

/ əNGgə'ZHə/ / əNGgə'ZƏ/ / əNGgə'ZƏr/

Origin

French, past participle of *engager* (see [engage](#)).

TRENDING WORDS

Most popular in the world

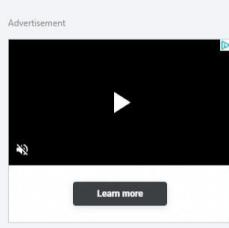
1. cuddle
2. neddy
3. guerrilla art
4. nitro
5. liegeman

Are You Learning English? Here Are Our Top English Tips



Basic Guidelines For English Spellings

[READ THESE ARTICLES](#)



Here Are The Top English Writing Tips

[READ THESE ARTICLES](#)



The Best Articles To Improve Your English Language Usage

[READ THESE ARTICLES](#)



Fun English Word Lists To Explore

[READ THESE ARTICLES](#)



The Most Common English Language Questions

[READ THESE ARTICLES](#)

Browse The English Dictionary: # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Find out More

About

Contact Us

Privacy Policy

Do Not Sell My Info

Dictionary & Synonyms

UK English Dictionary

US English Dictionary

Spanish Dictionary

English Synonyms

Translations

Spanish to English

English to Spanish

Explore

Articles

© 2022 Lexico.com



Collins

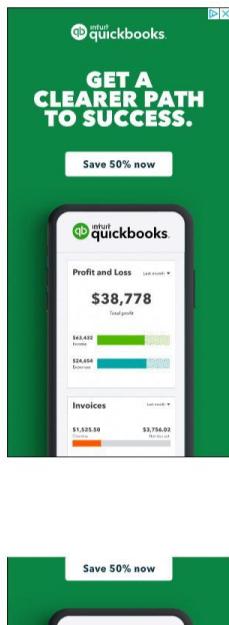
LANGUAGE TRANSLATOR GAMES SCHOOLS BLOG RESOURCES

Log In

engage

English French German Italian Spanish Portuguese Hindi Chinese Korean More ▾

English Dictionary Thesaurus Word Lists Grammar Conjugations Sentences Video Quiz



engage Video pronunciation English: engage English: engage American: engage American: engagé engage

Definition of 'engage'

engage

Collins COBUILD

(ingeɪdʒ) (1)

Word forms: 3rd person singular present tense **engages** (2), present participle **engaging** (3), past tense, past participle **engaged** (4)

1. VERB

If you **engage** in an activity, you do it or are actively involved with it.

[forma]

It is important for children to have time to engage in family activities. [VERB + in]

You can engage in croquet on the south lawn. [VERB in noun]

2. VERB

If something **engages** you or your attention or interest, it keeps you interested in it and thinking about it.

They never learned skills to engage the attention of the others. [VERB noun]

3. VERB

If you **engage** someone in conversation, you have a conversation with them.

They tried to engage him in conversation. [VERB noun + in]

We want to engage recognized leaders in discussion. [V. in. in]

Synonyms: [occupy](#), [involve](#), [draw](#), [busy](#) More Synonyms of [engage](#)

Word Frequency



Wordle Helper

Stuck at Wordle?
Try our helper to
maintain your current
streak!

Quick Word Challenge

Question 1 - Score: 0 / 5
groan or grown?

Which version is correct?

He began to **grown** with pain.

He began to **groan** with pain.

NEXT





4. VERB

If you **engage** with something or **with** a group of people, you get involved with that thing or group and feel that you are connected with it or have **real contact** with it.

She found it hard to engage with office life. [VERB + with]

I will keep blogging because it offers me a way to engage with readers. [VERB with noun]

engagement **UNCOUNTABLE NOUN**

And she, too, suffers from a lack of critical engagement with the literary texts. [+ with]

Synonyms: promise, word, contract, bond More Synonyms of **engage**

Synonyms: job, work, post, situation More Synonyms of **engage**

Synonyms: participation, joining, taking part, involvement More Synonyms of **engage**

5. VERB



We engaged the services of a recognised engineer. [VERB noun]

He had been able to engage some staff. [VERB noun]

Synonyms: employ, commission, appoint, take on More Synonyms of **engage**

6. VERB

When a part of a machine or other mechanism **engages** or when you **engage** it, it moves into a position where it fits into something else.

Press the lever until you hear the catch engage. [VERB]

...a lesson in how to engage the four-wheel drive. [VERB noun]

Synonyms: interlock, join, interact, mesh More Synonyms of **engage**



AUGUST 22, 2022

READ MORE

7. VERB

When a military force **engages** the enemy, it attacks them and starts a battle.

It could engage the enemy beyond the range of hostile torpedoes. [VERB noun]

Synonyms: begin battle with, attack, take on, encounter More Synonyms of **engage**

8. See also engaged, engaging



Video pronunciation English: engage English: engagé American: engage American: engagé engage eng ►

COBUILD Advanced English Dictionary. Copyright © HarperCollins Publishers

Video: pronunciation of

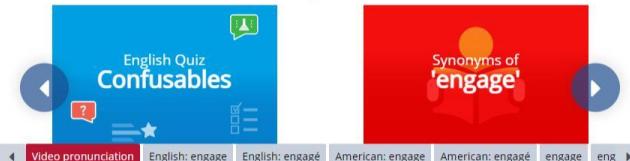
engage



GET IT NOW
(800) 501-6000

COMCAST
BUSINESS

• You may also like •



engage

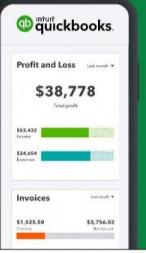
Word Frequency



COMCAST BUSINESS

CLEARER PATH TO SUCCESS.

Save 50% now



in British English

(In geridz ⓘ ⓘ)

VERB (mainly tr)

1. to secure the services of; employ
2. to secure for use; reserve
engage a room
3. to involve (a person or his or her attention) intensely; engross; occupy
4. to attract (the affection) of (a person)
her innocence engaged him
5. to draw (somebody) into conversation
6. (intransitive)
to take part; participate
he engages in many sports
7. to promise (to do something)
8. (also intr) military
to begin an action with (an enemy)
9. to bring (a mechanism) into operation
he engaged the clutch
10. (also intr)
to undergo or cause to undergo interlocking, as of the components of a driving mechanism, such as a gear train
11. machinery
to locate (a locking device) in its operative position or to advance (a tool) into a workpiece to commence cutting

Derived forms

engager (en'gāzhər) **NOUN**

Word origin

C15: from Old French *engagier*, from *en-* + *gage* a pledge, see *GAGE*¹

engagé

in British English

French (ĕgăzhĕ ⓘ)

ADJECTIVE

(of a male writer or artist) morally or politically committed to some ideology

Word Frequency: ●●●●●



GET IT NOW
(800) 501-6000

COMCAST BUSINESS



Collins English Dictionary. Copyright © HarperCollins Publishers

engage

in American English

Word Frequency ●●●●●

[American: engage](#) [American: engagé](#) [engage](#) [engagé](#) [Specialist English: engage](#) [Example sentences](#) [CO](#)

Word forms: [en gaged](#) or [en gaging](#)

1. *Obsolete*
to give or assign as security for a debt, etc.
2. to bind (oneself) by a promise; *pledge*; specif. (now only in the passive), to bind by a promise of marriage;
brothel
he is engaged to Ann
3. to arrange for the services of; *hire*; employ
to engage a lawyer
4. to arrange for the use of; reserve
to engage a hotel room
5. to draw into; involve
to engage him in conversation
6. to attract and hold (the attention, etc.)
7. to employ or keep busy; occupy
reading engages his spare time
8. to enter into conflict with (the enemy)
9.
 - a. to interlock with or cause to come into frictional driving contact with
 - b. to mesh together
engage the gears
10. *Obsolete*
to entangle; ensnare

Plus the most reliable 5G mobile network.

COMCAST BUSINESS
7867 5678
COMCAST CLOUD

[GET IT NOW](#)
(800) 501-6000

American: engage American: engage engage engage Specialist English: engage Example sentences CO ▶

VERB INTRANSITIVE

11. to pledge oneself; promise; undertake; agree
to engage to do something
12. to occupy or involve oneself; take part; be active
to engage in dramatics
13. to enter into conflict
14. to interlock; mesh

Webster's New World College Dictionary, 4th Edition. Copyright © 2010 by Houghton Mifflin Harcourt. All rights reserved.

Word origin

ME *engagen* < OFr. *engagier*: see *en-*¹ & *gage*¹

engagé Word Frequency ●●●●●

in American English

(ĕgă'jĕt) French

ADJECTIVE

committed to supporting some aim, cause, etc.

Webster's New World College Dictionary, 4th Edition. Copyright © 2010 by Houghton Mifflin Harcourt. All rights reserved.

American: engage engage engage Specialist English: engage Example sentences COBUILD Collocations ▶

engage Word Frequency ●●●●●

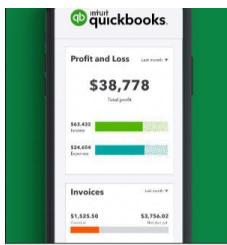
in American English

(ĕn'gĕdʒ) (verb) -gaged, -gaging

TRANSITIVE VERB

1. to occupy the attention or efforts of (a person or persons)
He engaged her in conversation

COMCAST BUSINESS
7867 5678
(800) 501-6000



2. to secure for aid, employment, use, etc.; hire
to engage a worker
to engage a room
3. to attract and hold fast
The novel engaged her attention and interest
4. to attract or please
His good nature engages everyone
5. to bind, as by pledge, promise, contract, or oath; make liable
He engaged himself to repay his debt within a month
6. to betroth (usually used in the passive)
They were engaged last week
7. to bring (troops) into conflict; enter into conflict with
Our army engaged the enemy
8. *Mechanics*
to cause (gears or the like) to become interlocked; interlock with
9. to attach or secure
10. *obsolete*
to entangle or involve

Save 50% now

engaged engage Specialist English: engage Example sentences COBUILD Collocations Trends In other la ▶

\$700
2364 5978
/25 PER VISA
GET IT NOW
(800) 501-6000

With fast Internet & advanced cybersecurity.

COMCAST BUSINESS

INTRANSITIVE VERB

11. to occupy oneself; become involved
to engage in business or politics
12. to take employment
She engaged in her mother's business
13. to pledge one's word; assume an obligation
I was unwilling to engage on such terms
14. to cross weapons; enter into conflict
The armies engaged early in the morning
15. *Mechanics (of gears or the like)*
to interlock

SYNOMYNS

1. absorb, engross, interest, involve.

ANTONYMS

2. discharge. 8. release.

Most material © 2005, 1997, 1991 by Penguin Random House LLC. Modified entries © 2019 by Penguin Random House LLC and HarperCollins Publishers Ltd

Derived forms

engagé

Specialist English: engage

Example sentences

COBUILD Collocations

Trends

In other languages



[1515–25; < MF *engager*, OF *engagier*. See *en*¹, *gage*¹]

engagé

in American English

(French *ə ga'zœ*)

ADJECTIVE

choosing to involve oneself in or commit oneself to something

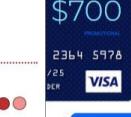
Some of the political activists grew less engagé as the years passed

Most material © 2005, 1997, 1991 by Penguin Random House LLC. Modified entries © 2019 by Penguin Random House LLC and HarperCollins Publishers Ltd

Word origin

[1950–55; < F: lit., engaged]

Word Frequency



With fast
Internet &
advanced
cybersecurity.

COMCAST
BUSINESS

GET IT NOW
(800) 501-6000

engage

in Automotive Engineering

(inge)dʒ)

Word forms: (*present*) engages, (*past*) engaged, (*perfect*) engaged, (*progressive*) engaging

Word Frequency



VERB

(*Automotive engineering*: Vehicle components, Engine, transmission, and exhaust)

If you **engage** a clutch or a gear, you put the mechanism into operation.

COLLOCATIONS: ~ the clutch

She engaged the clutch and the vehicle started to move away.



is no jerkiness.



With fast
Internet &
advanced
cybersecurity.

**CLEARER PATH
TO SUCCESS.**

Save 50% now

Introducing
**Small
Business
Savings.**

COMCAST
BUSINESS
Powering Businesses™

GET IT NOW
(800) 501-6000

ESB4 3776
7/25
EXPIRE
VISA

advanced
cybersecurity.

GET IT NOW
(800) 501-6000

COMCAST
BUSINESS

COBUILD Key Words for Automotive Engineering. Copyright © HarperCollins Publishers

Examples of 'engage' in a sentence

engage

▲ These examples have been automatically selected and may contain sensitive content that does not reflect the opinions or policies of Collins, or its parent company HarperCollins.

We welcome feedback: report an example sentence to the Collins team. Read more...

The key to getting them off without causing an argument is to engage them with something else.
THE SUN (2016)

It's feelgood, and people want to engage with that.
THE SUN (2016)

Our main object is to engage enemy bombers.
TIMES, SUNDAY TIMES (2010)

This enables us to engage with groups and individuals that statutory providers find difficult.
TIMES, SUNDAY TIMES (2006)

APPELBAUM, RICHARD P. SOCIOLOGY (19...

Now the gangs are back fighting turf wars and engaging in gun battles with police.
TIMES, SUNDAY TIMES (2016)

But fair dealing is not a subject that engages the attention of any of the contributors.
THE TIMES LITERARY SUPPLEMENT (2010)

Then the going got a bit snowy and steep and it was time to engage four-wheel drive.
TIMES, SUNDAY TIMES (2014)

But sensors monitor road conditions and automatically engage four-wheel drive when necessary.
THE SUN (2006)

He has been warned that he will no longer be engaged in the passive defence of his country, but taking the battle to the enemy.
TIMES, SUNDAY TIMES (2006)

**GET A
CLEARER PA
TO SU**

Save 50% now

\$700
1234 5678
6/25
EXPIRE
VISA

With fast
Internet &
advanced
cybersecurity.

GET IT NOW
(800) 501-6000

COMCAST
BUSINESS



COBUILD Collocations

engage

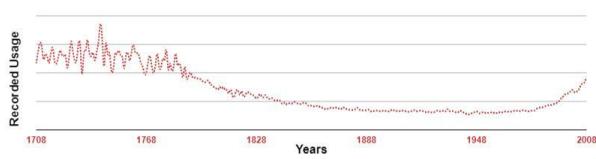
BETA

- engage a reader
- engage fully
- engage politically
- engage seriously
- engage socially
- engage the imagination
- engage the viewer

Trends of

age engage Specialist English: engage Example sentences COBUILD Collocations Trends In other languages

View usage for: All Years



Recorded Usage

Years: 1700, 1768, 1828, 1888, 1948, 2008

We power more businesses than any other provider.



GET IT NOW
(800) 501-6000

COMCAST BUSINESS



SEE YOUR WHOLE BUSINESS.
Save 50% now

In other languages

engage

British English: engage ⓘ verb /ɪn'geɪdʒ/
to engage in sth If you *engage in* an activity, you do it or are actively involved with it.
Many of these people *engage* in criminal activities.

American English: engage ⓘ /ɪn'geɪdʒ/	Italian: dedicarsi ⓘ
Brazilian Portuguese: engrenar ⓘ	Japanese: 従事する
Chinese: 从事	Korean: ~에 관여하다
European Spanish: dedicarse a ⓘ	European Portuguese: engrenar ⓘ
French: prendre part ⓘ	Latin American Spanish: dedicarse a ⓘ
German: einrasten ⓘ	Thai: ចំណាំ, អីរាយ, ចាប់ចូលកិច្ចរាយ

Translate your text for free

Browse alphabetically

engage

- [Eng. D.](#)
- [Engadine](#)
- [engage](#)
- [engage a pupil](#)
- [engage a reader](#)
- [engage actively](#)

All ENGLISH words that begin with 'E'

Related terms of

engage

- [engage fully](#)
- [engage actively](#)
- [engage socially](#)
- [engage a pupil](#)

[View more related words](#)

Source

Definition of **engage** from the Collins English Dictionary
Read about the team of authors behind Collins Dictionaries.

• New from Collins •

Quick Word Challenge

Question: 1 ~ Score: 0 / 5
plain or plane?

Which version is correct?

A plain carpet makes a room look bigger.

A plane carpet makes a room look bigger.



Aug 25, 2022

Word of the day

crystal set

an early form of radio receiver having a crystal detector to demodulate the radio signals but no

[NEXT](#)

● ● ● ○ ○

[SEE FULL DEFINITION](#)

[SEE PREVIOUS WORDS](#)



Save 50% now



We power more businesses than any other provider.

\$700
787-5178 235-1778
COMCAST BUSINESS

GET IT NOW
(800) 501-6000



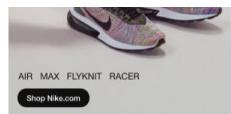
Save 50% now



We power more businesses than any other provider.

\$700
787-5178 235-1778
COMCAST BUSINESS

GET IT NOW
(800) 501-6000



This page in

English ▾

FAQS
Related Links ▾

Browse all official Collins
dictionaries

About Us Contact Us

Cookies Settings

Terms & Conditions

Privacy Policy

California Privacy Rights

Do Not Sell My Personal Information

© Collins 2022

United States Patent and Trademark Office (USPTO)

USPTO OFFICIAL NOTICE

Office Action (Official Letter) has issued
on August 25, 2022 for
U.S. Trademark Application Serial No. 97120294

A USPTO examining attorney has reviewed your trademark application and issued an Office action. You must respond to this Office action in order to avoid your application abandoning. Follow the steps below.

- (1) [**Read the Office action.**](#) This email is NOT the Office action.
- (2) **Respond to the Office action by the deadline** using the Trademark Electronic Application System (TEAS). Your response must be received by the USPTO on or before 11:59 p.m. **Eastern Time** of the last day of the response period. Otherwise, your application will be [abandoned](#). See the Office action itself regarding how to respond.
- (3) **Direct general questions** about using USPTO electronic forms, the USPTO [website](#), the application process, the status of your application, and whether there are outstanding deadlines to the [Trademark Assistance Center \(TAC\)](#).

After reading the Office action, address any question(s) regarding the specific content to the USPTO examining attorney identified in the Office action.

GENERAL GUIDANCE

- [**Check the status of your application periodically**](#) in the [Trademark Status & Document Retrieval \(TSDR\)](#) database to avoid missing critical deadlines.
- [**Update your correspondence email address**](#) to ensure you receive important USPTO notices about your application.
- [**Beware of trademark-related scams**](#). Protect yourself from people and companies that may try to take financial advantage of you. Private companies may call you and pretend to be the USPTO or may send you communications that resemble official USPTO documents to trick you. We will never request your credit card number or social security number over the phone. And all official USPTO correspondence will only be emailed from the domain “@uspto.gov.” Verify the correspondence originated from us by using your Serial Number in our database, [TSDR](#), to confirm that it appears under the “Documents” tab, or contact the [Trademark Assistance Center](#).

- **Hiring a U.S.-licensed attorney.** If you do not have an attorney and are not required to have one under the trademark rules, we encourage you to hire a U.S.-licensed attorney specializing in trademark law to help guide you through the registration process. The USPTO examining attorney is not your attorney and cannot give you legal advice, but rather works for and represents the USPTO in trademark matters.